

SACRAMENTO REGION

Blueprint

TRANSPORTATION / LAND USE STUDY

FHWA April 2, 2004



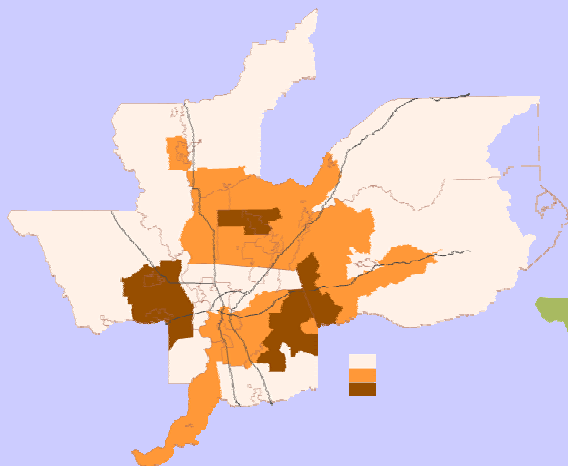


Five Major Phases

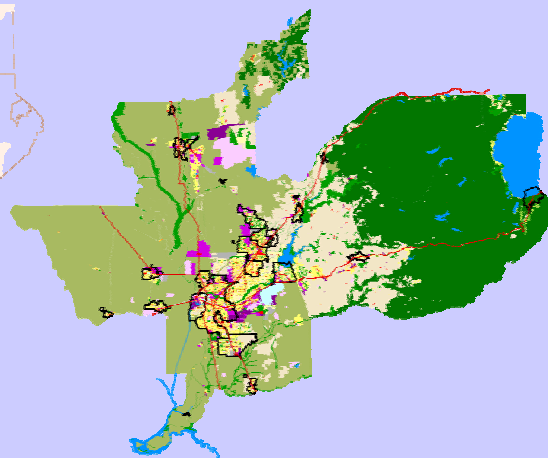
1. Better information and tools for decision-making
2. Base Case Future (Regional Scale)
3. Workshops
 - Neighborhood scale (30)
 - County scale (7)
 - Regional scale (including electronic town hall)
4. Integration with Community Design program
5. Implementation (next MTP)



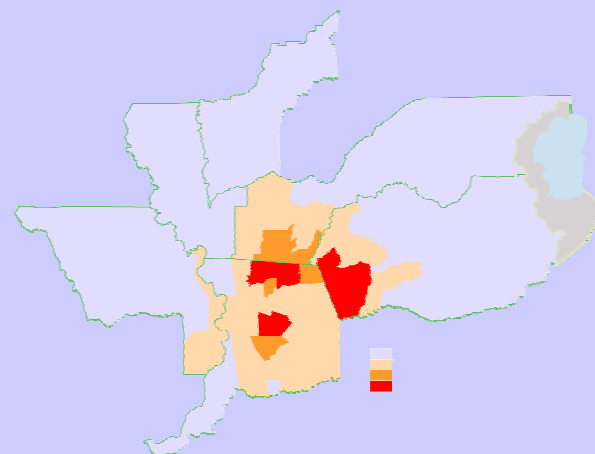
Develop Better Information and Tools for Decision Making



**MEPLAN - Land
Economics**



**PLACE³S - Land
Use/Transportation
Impacts**



**SACMET & 4Ds -
Transportation**



4D's

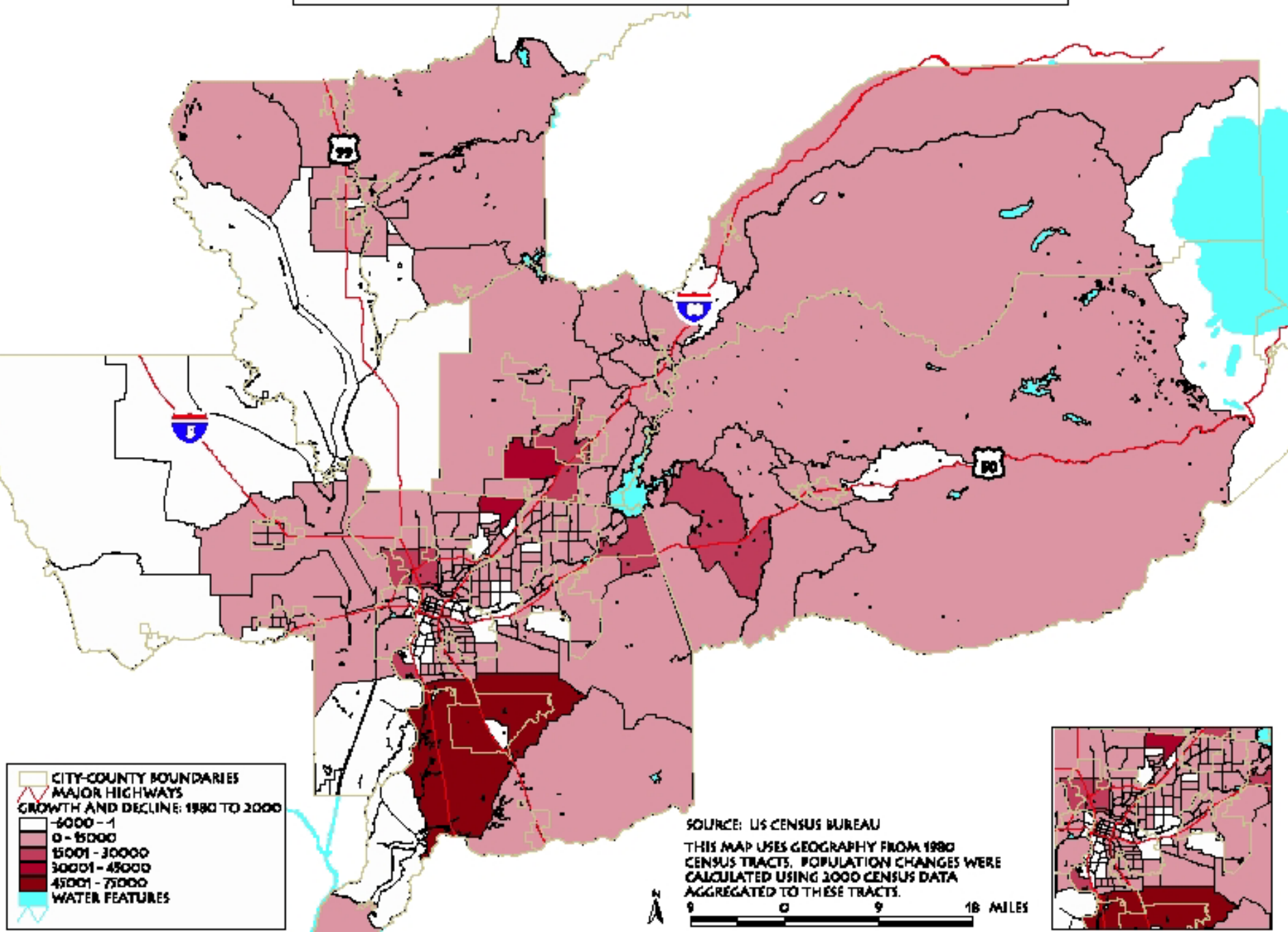
- Land use influences on travel behavior
 - Density
 - Diversity
 - Destination (location)
 - Design
- SACMET regional travel model
 - Post processor for vmt, vt and mode share
 - Fully integrated in future
- PLACE³S
 - Real-time indicators at neighborhood scale



Economic Forecast

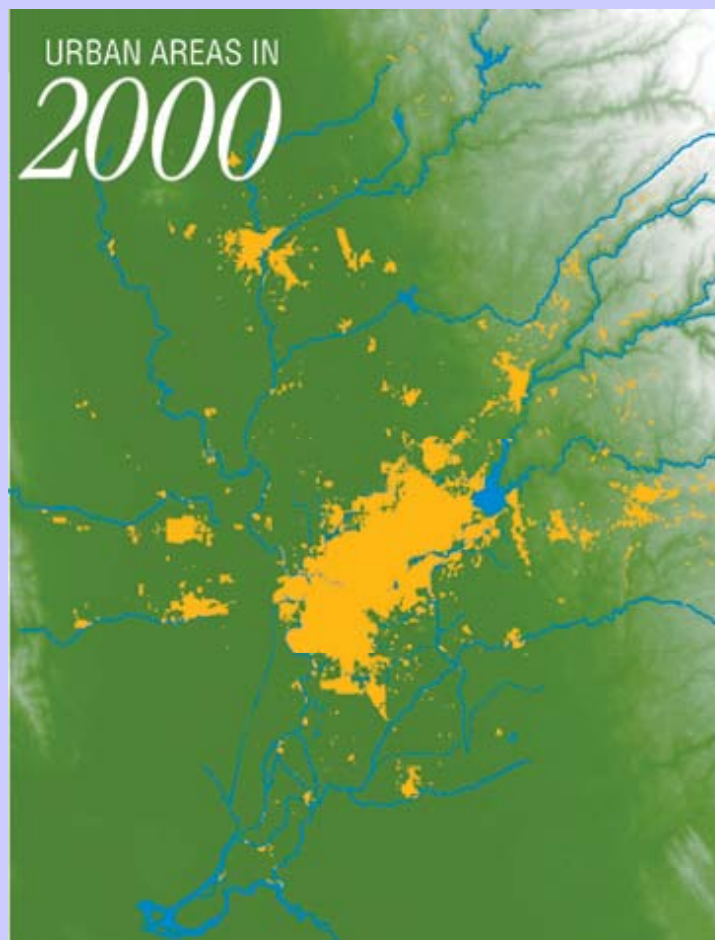
- Center for Continuing Study of California Economy, Steven Levy
- Region positioned to be very competitive
 - Nationally
 - California
- But, must building the housing for employees
- More service sector, fewer industrial jobs
- Changing demographics
 - Strong growth in senior households
 - Declining % of families with children

POPULATION GROWTH AND DECLINE: 1980 TO 2000



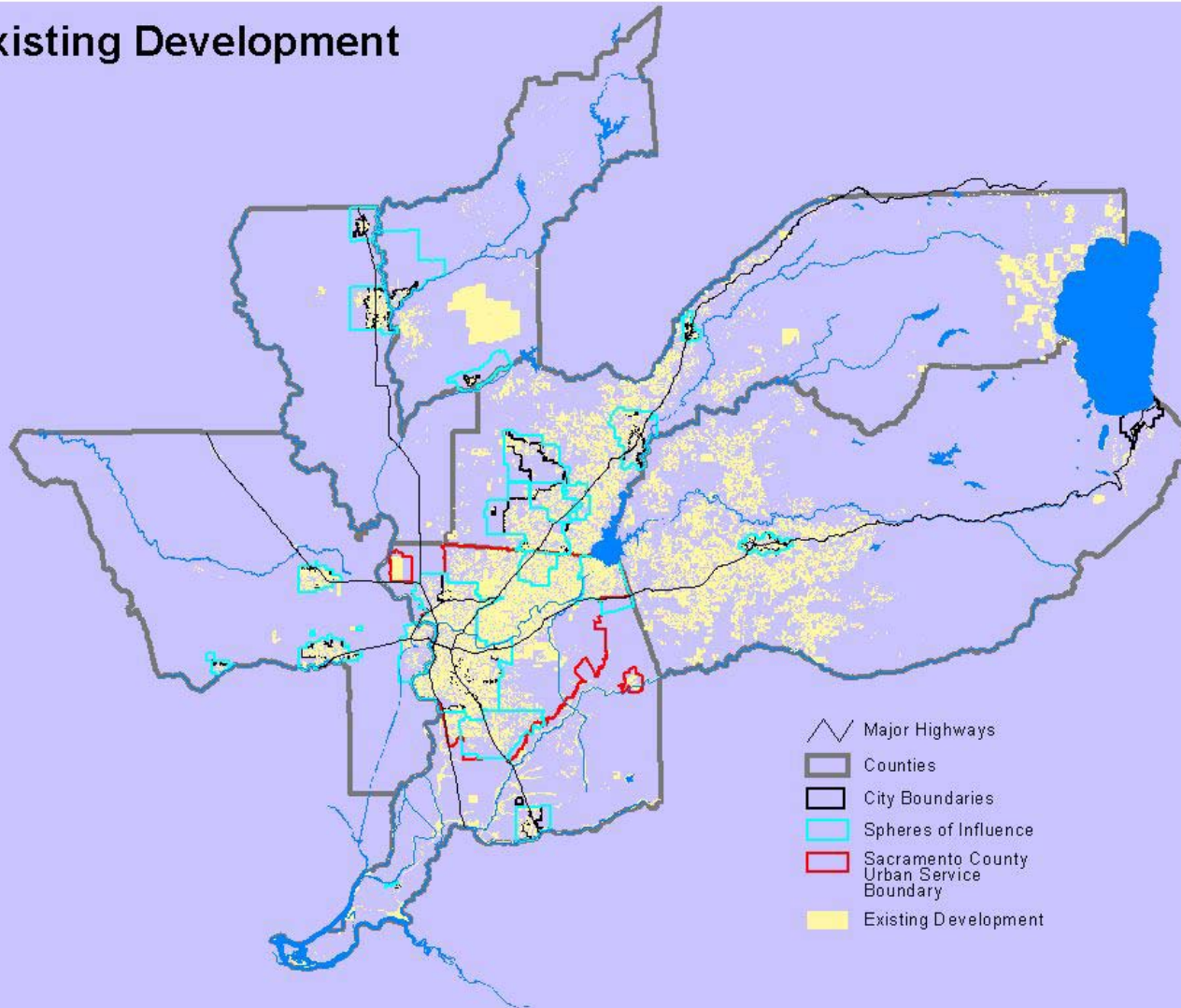


How would the region change if the Base Case Future became reality?



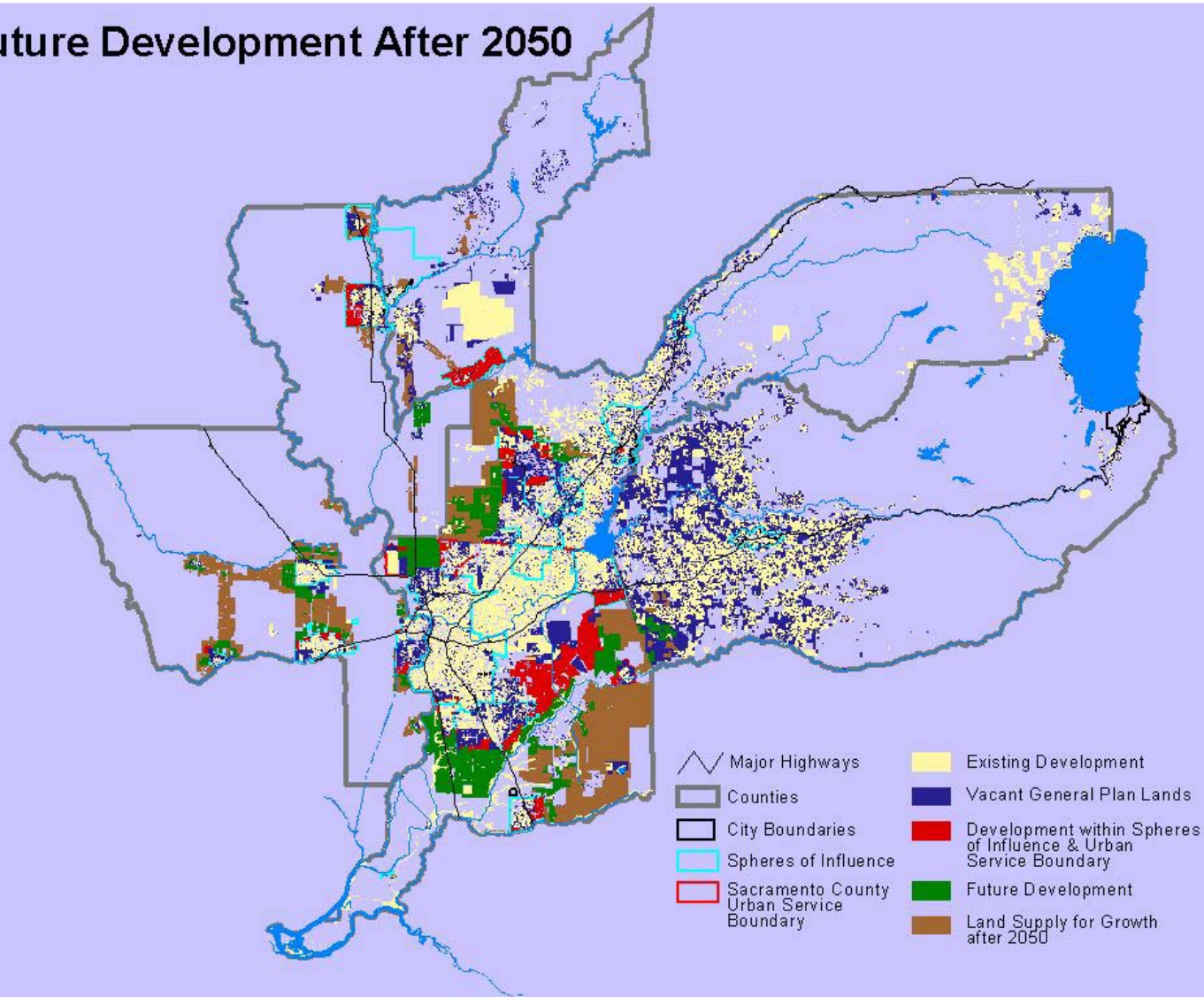
Base Case Future

Existing Development



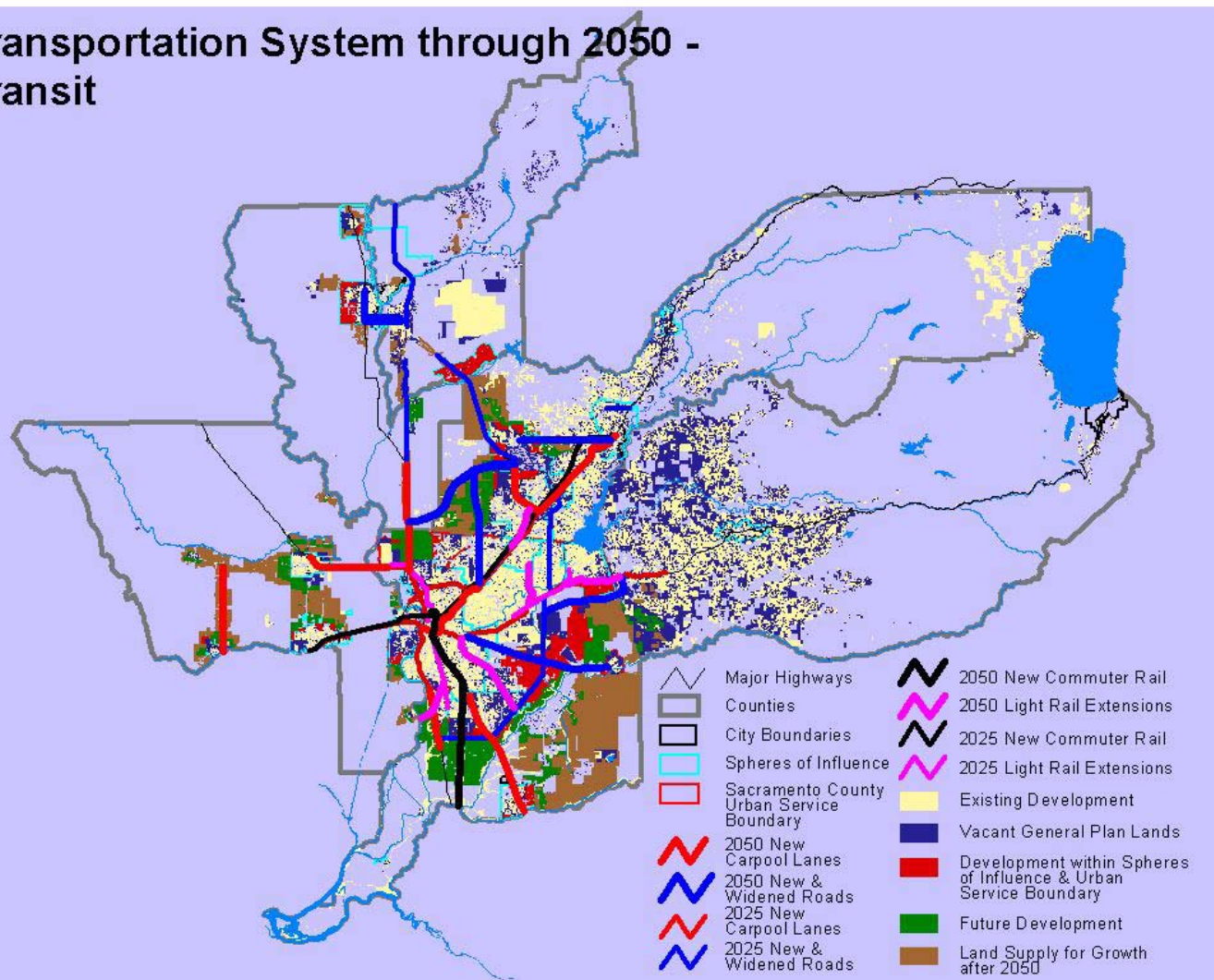


Future Development After 2050





Transportation System through 2050 - Transit



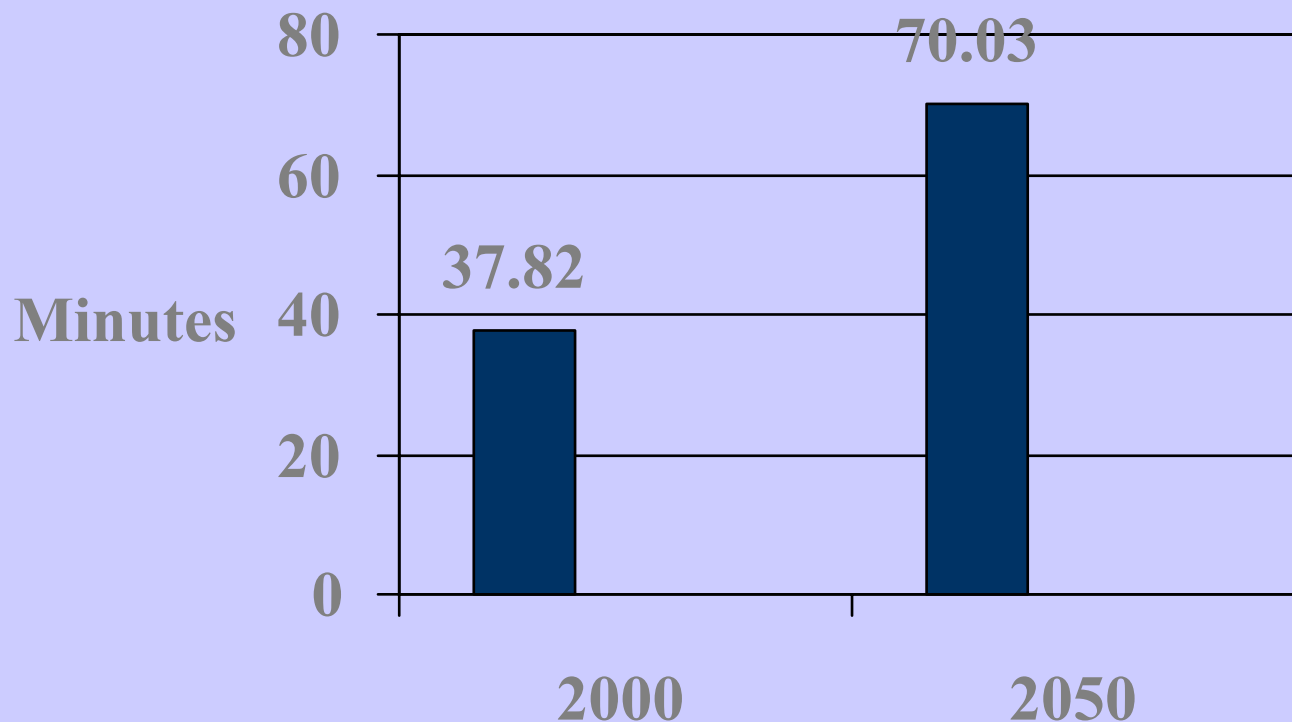


Features of Base Case Land Use

- Low residential densities
 - @ 3 dwelling units/acre
 - @ 5 dwelling units/acre excluding “rural residential” (5% of supply)
- Big shortage of rental products
- Growth continues in outward pattern
- Poor jobs-housing balance in some areas

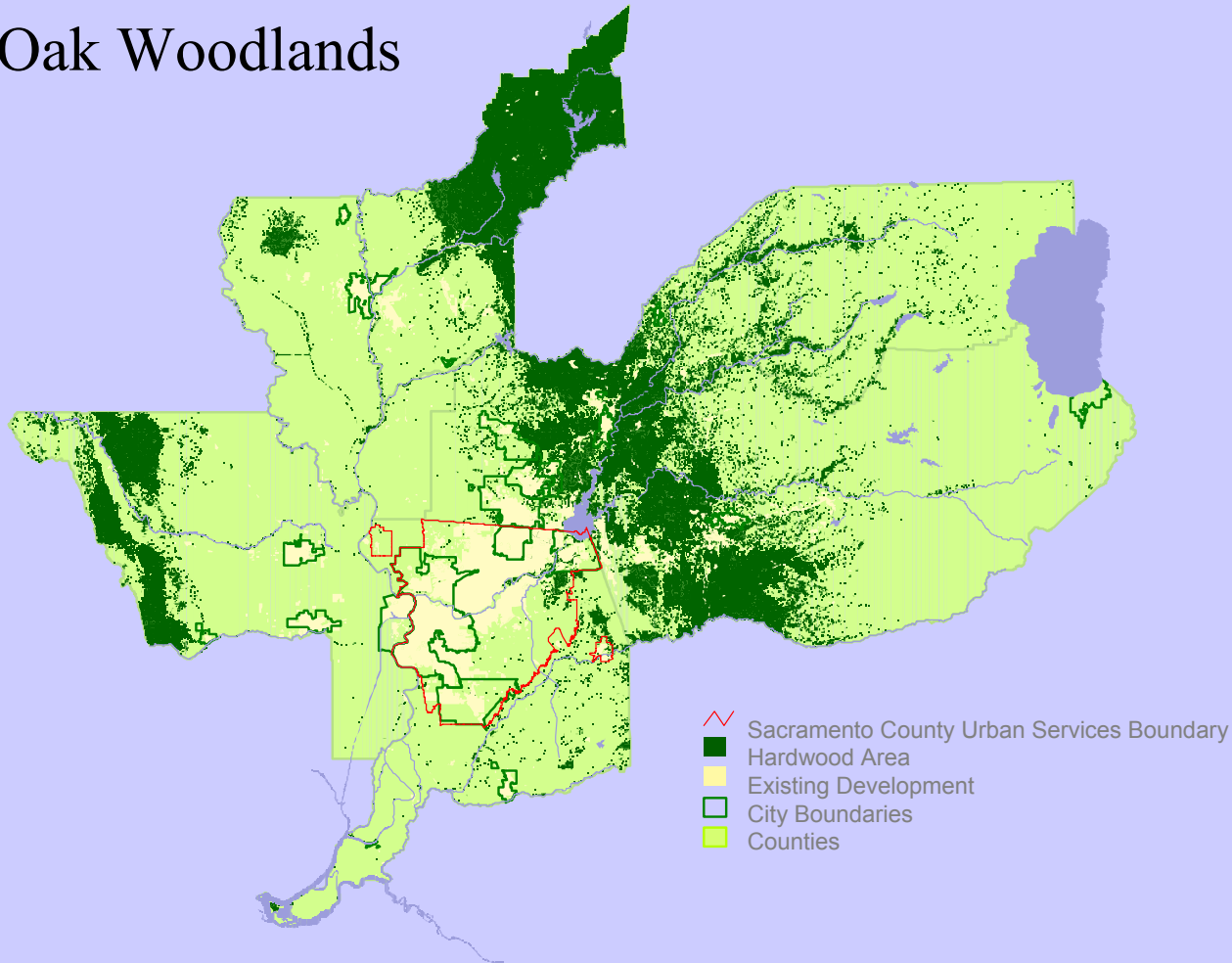


Vehicle Minutes/Person Increase of 160 Hours Annually



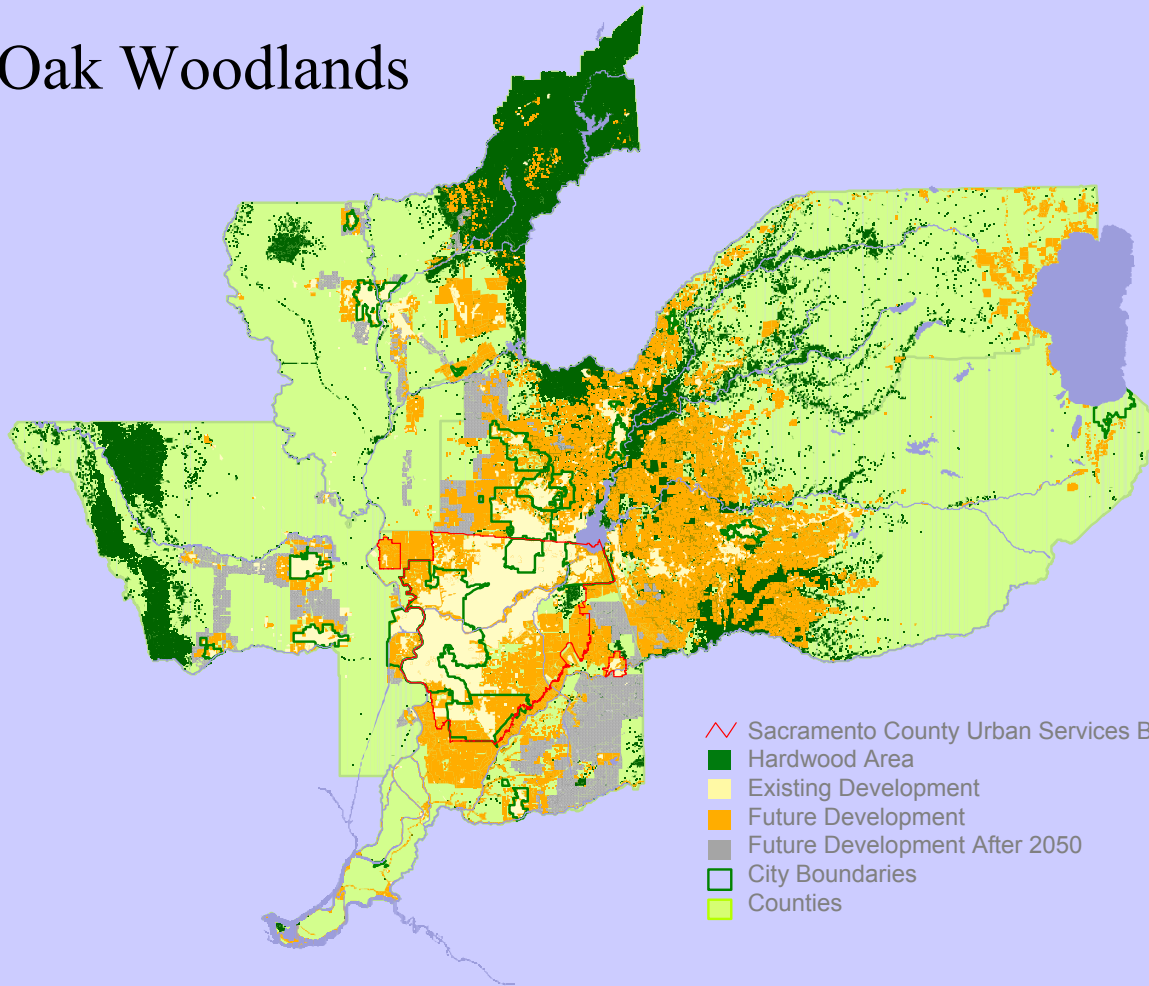
Principle 6. Protecting Natural Resources & Farmland

Oak Woodlands



Principle 6. Protecting Natural Resources & Farmland

Oak Woodlands



- 95,525 acres affected by development
- 21% of total resource

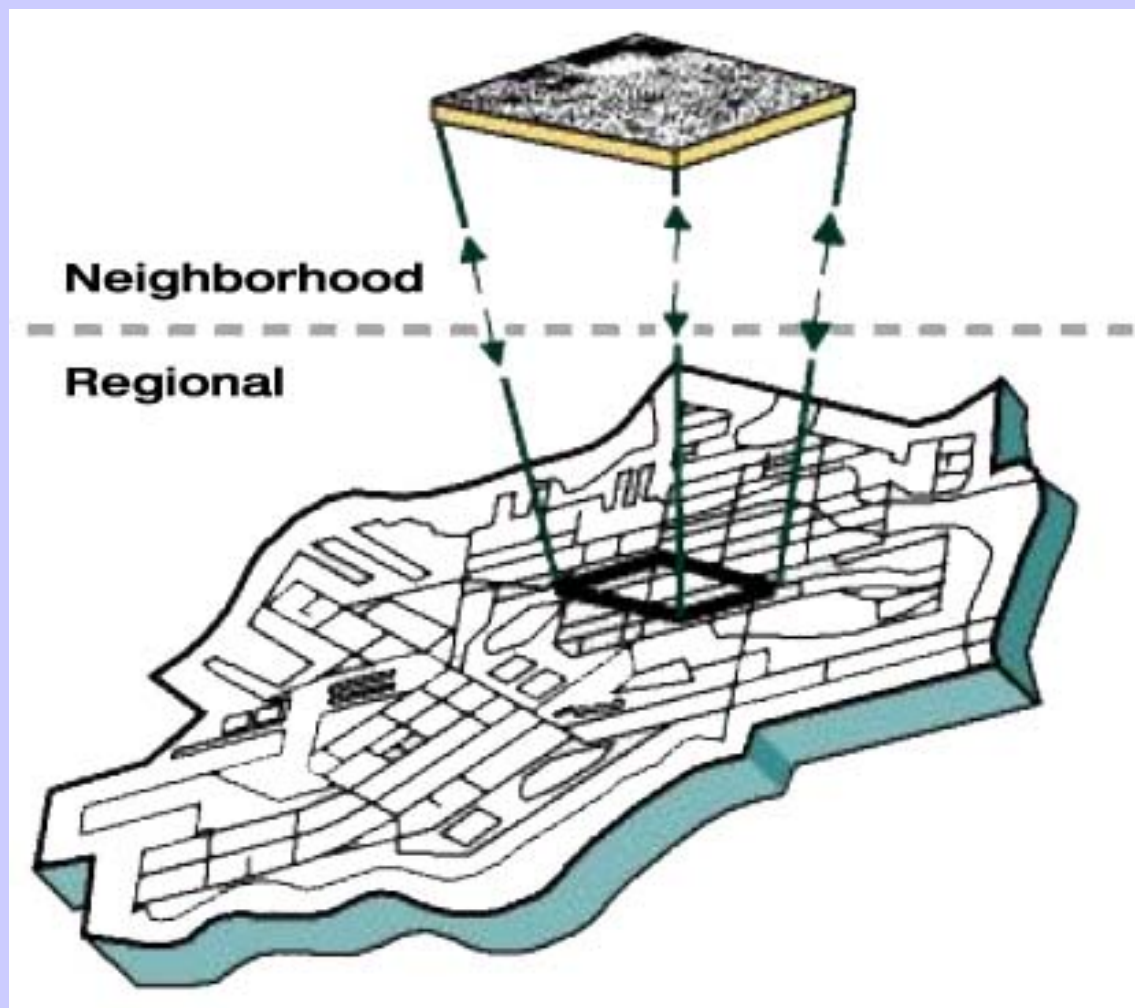


Smart Growth Principles

1. Transportation Choice
2. Housing Choice
3. Compact Development
4. Use of Existing Assets
5. Mixed Use Development
6. Natural Resource Conservation
7. Quality Design



Need to plan both the regional and neighborhood levels





Neighborhood-scale Workshops

- 30 workshops
- Two 100-200 acre study areas at each workshop
 - One infill/redevelopment study area
 - One greenfield study area
- “Test drive” smart growth concepts
- PLACE³S Real-time performance indicators
 - Laptop computers
 - Cell phone hook-up
 - Public domain software

LAND USE MENU

Land Use Types

RESIDENTIAL BUILDING TYPES							
1	Rural Residential			2	1	--	Rural residential includes very large lot residential (1 acre per lot).
2	Large Lot Single Family Residential			1	4	--	Arden Park has mainly large lots in the 1/2 to 1/3 acre size. Gardenland (South Natomas) has grid-streets with 1 acre lots and small houses.
3	Medium Lot Single Family Residential			2	6	--	Standard single family lot of 52x100 min. Allows cul-de-sacs or grid pattern, w/cul-de-sac subdivisions at low end of range. Curtis Park at high end of range.
4	Small Lot Single Family Residential			2	12	--	Small lot subdivisions: Villa Palazzo in Pocket (3,500 sqft lots), standard lots in Laguna West and some low density suburban garden apartments.
5(O)	Townhouse (Owner)			3	15	--	Metro Square in midtown is detached townhouse project at approx. 20 D/U/ac. Most standard 2-story apts w/ surface parking are in this range.
5(R)	Townhouse (Rental)						
6(O)	Low-Rise Condos (Owner)			2	24	--	2+ story attached units with structured parking (e.g., tuck-under).
6(R)	Low-Rise Apartments (Rental)						
7(O)	Mid-Rise Condos (Owner)			3	35	--	3 story mid-level development. Less space dedicated to landscaping; more frontage on street.
7(R)	Mid-Rise Apartments (Rental)						
8(O)	High-Rise Condos (Owner)			6	66	--	6 story development with structured parking. Buildings include elevators, interior courtyards, and hallways.
8(R)	High-Rise Apartments (Rental)						
9(O)	Urban Condos (Owner)			10	105	--	10 story urban development. Buildings may include a health facility, door man, etc.
9(R)	Urban Apartments (Rental)						



Stickers

LAND USE CHIP SET

1

1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)	5(O)
5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)	5(R)
6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)	6(O)
6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)	6(R)
7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)	7(O)
7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)	7(R)
8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)	8(O)
8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)	8(R)
9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)	9(O)
9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)	9(R)
10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13

LAND USE CHIP SET

2

14(O)	14(O)	14(O)	14(O)	14(O)	14(O)	14(O)	14(O)	14(O)	14(O)	14(O)	14(O)
15(O)	15(O)	15(O)	15(O)	15(O)	15(O)	15(O)	15(O)	15(O)	15(O)	15(O)	15(O)
15(R)	15(R)	15(R)	15(R)	15(R)	15(R)	15(R)	15(R)	15(R)	15(R)	15(R)	15(R)
16(O)	16(O)	16(O)	16(O)	16(O)	16(O)	16(O)	16(O)	16(O)	16(O)	16(O)	16(O)
16(R)	16(R)	16(R)	16(R)	16(R)	16(R)	16(R)	16(R)	16(R)	16(R)	16(R)	16(R)
17(O)	17(O)	17(O)	17(O)	17(O)	17(O)	17(O)	17(O)	17(O)	17(O)	17(O)	17(O)
17(R)	17(R)	17(R)	17(R)	17(R)	17(R)	17(R)	17(R)	17(R)	17(R)	17(R)	17(R)
18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23
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WORKSHOP Citrus Heights





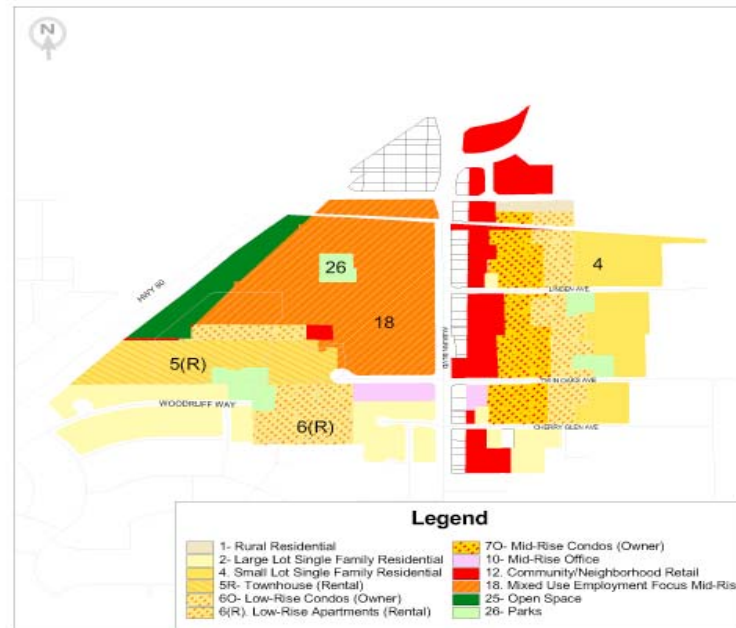
WORKSHOP

Citrus Heights



TABLE 6

Auburn Boulevard — Alternative Scenario



Key Elements of Planning Scenario

- Light rail stop, park and ride lot, and transit hub at north end
- Widened Auburn
- Mixed use employment focus mid-rise community built around large park

PLACE'S Indicators

Total Employees	1,581
Total Dwelling Units	2,257
Total Residents	1,091
Employees/Dwelling Unit	1.45
Retail Jobs	873
Office Jobs	707
Industrial Jobs	0
Public Jobs	0
Pedestrian Friendliness (5 = exceptionally good)	3.21
Total Peak Hour Trips	655
Vehicle Miles Traveled (energy use and air emissions)/Capita Change (from current conditions)	-41%
Vehicle Trips/Capita Change (from current conditions)	-16%

Key Land Uses
 Featured



4 Small-lot Single
 Family Residential



26 Parks



18 Mixed-use
 Employment Focus
 High-rise



6(R) Low-rise
 Apartments (rental)



5(R) Townhouse
 (rental)

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USING PLACE³S TO COMPARE ALTERNATIVE PLANNING SCENARIOS

- Vehicle mile traveled and vehicle trips
- Change in walk/bike and transit mode shares
- Mobile source air emissions/energy use
- Total jobs and dwelling units
- Density by land use type
- Mix of uses
- Economic feasibility
- Match of wages and housing costs (coming)

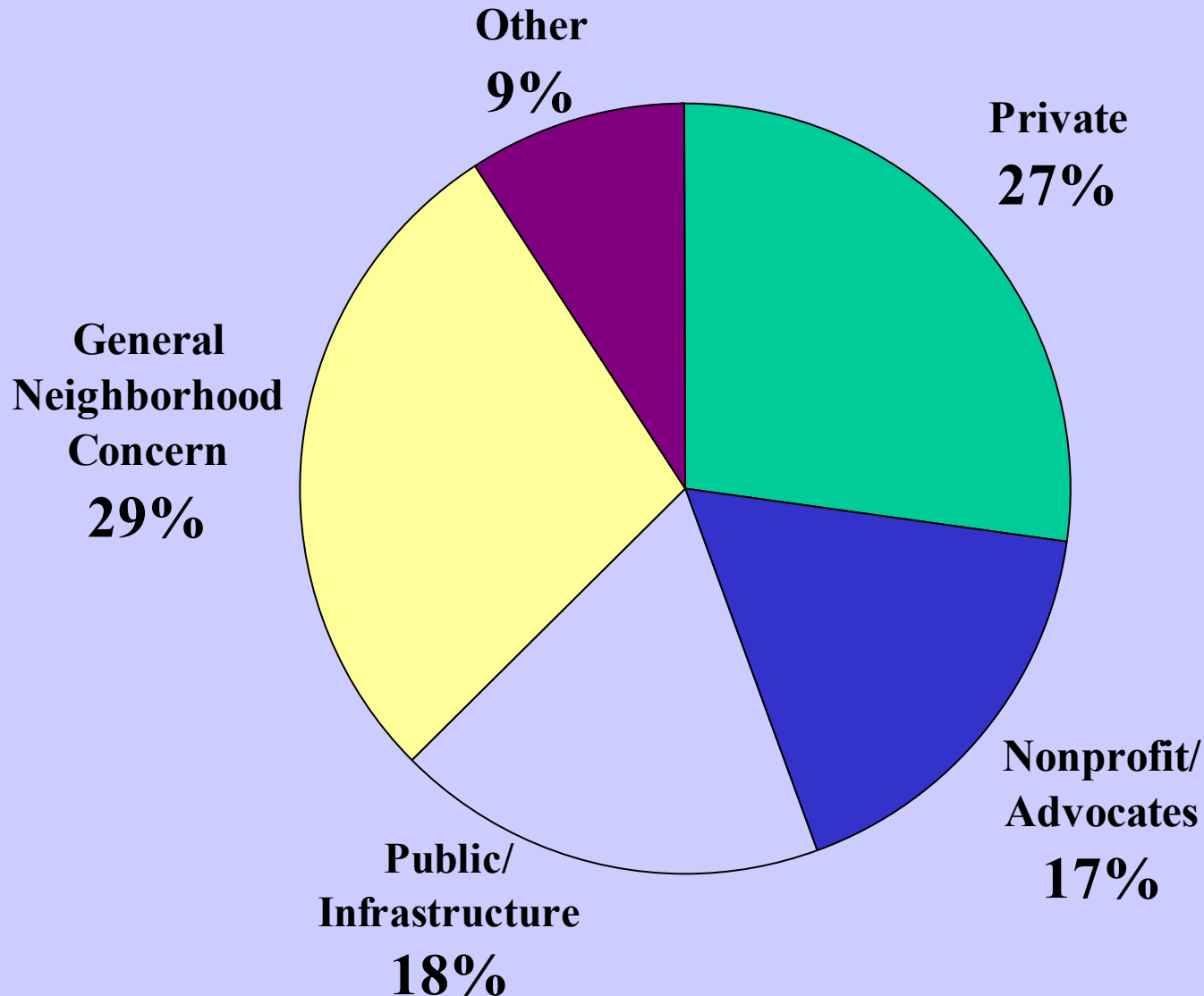


Summary of Blueprint Neighborhood Workshops

- 30 workshops
- 60 study areas
 - Greenfield (@7500 acres)
 - Infill/redevelopment (@7500 acres)
- 1500+ participants
- Broad representation



Blueprint Neighborhood Workshop Participants





New Development Capacity in Workshop Plans

- Participants increased development capacity in average study area by:
 - 1699 dwelling units
 - 1808 employees
 - Jobs-housing balance of 1.1
- Surprisingly similar viewpoints across neighborhoods



Development Density in Workshop Plans

- Average residential densities for new development
 - 21 dwelling units/acre infill
 - 12 dwelling units/acre greenfield



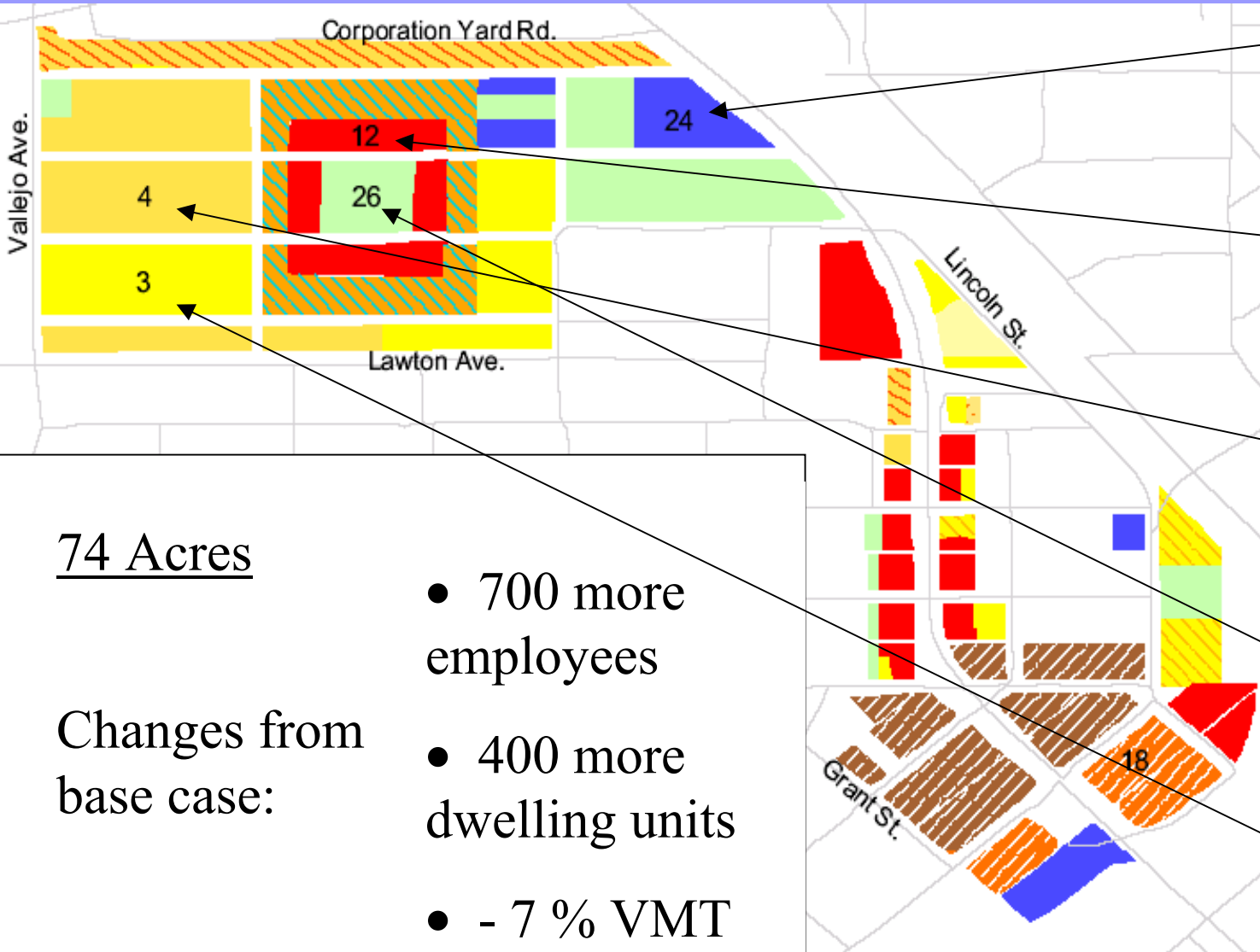
PLACE³S Economic Reality Test

- Analyze building type placed on every parcel for...
- Expected costs vs. expected revenues
- Calculate ROI (Return on Investment)
- Local data, available regionwide

Roseville Fairgrounds



Roseville Fairgrounds



74 Acres

Changes from
base case:

- 700 more employees
- 400 more dwelling units
- - 7 % VMT

Key Land Uses Featured



24 Public/Civic/
Education



12 Community/
Neighborhood Retail



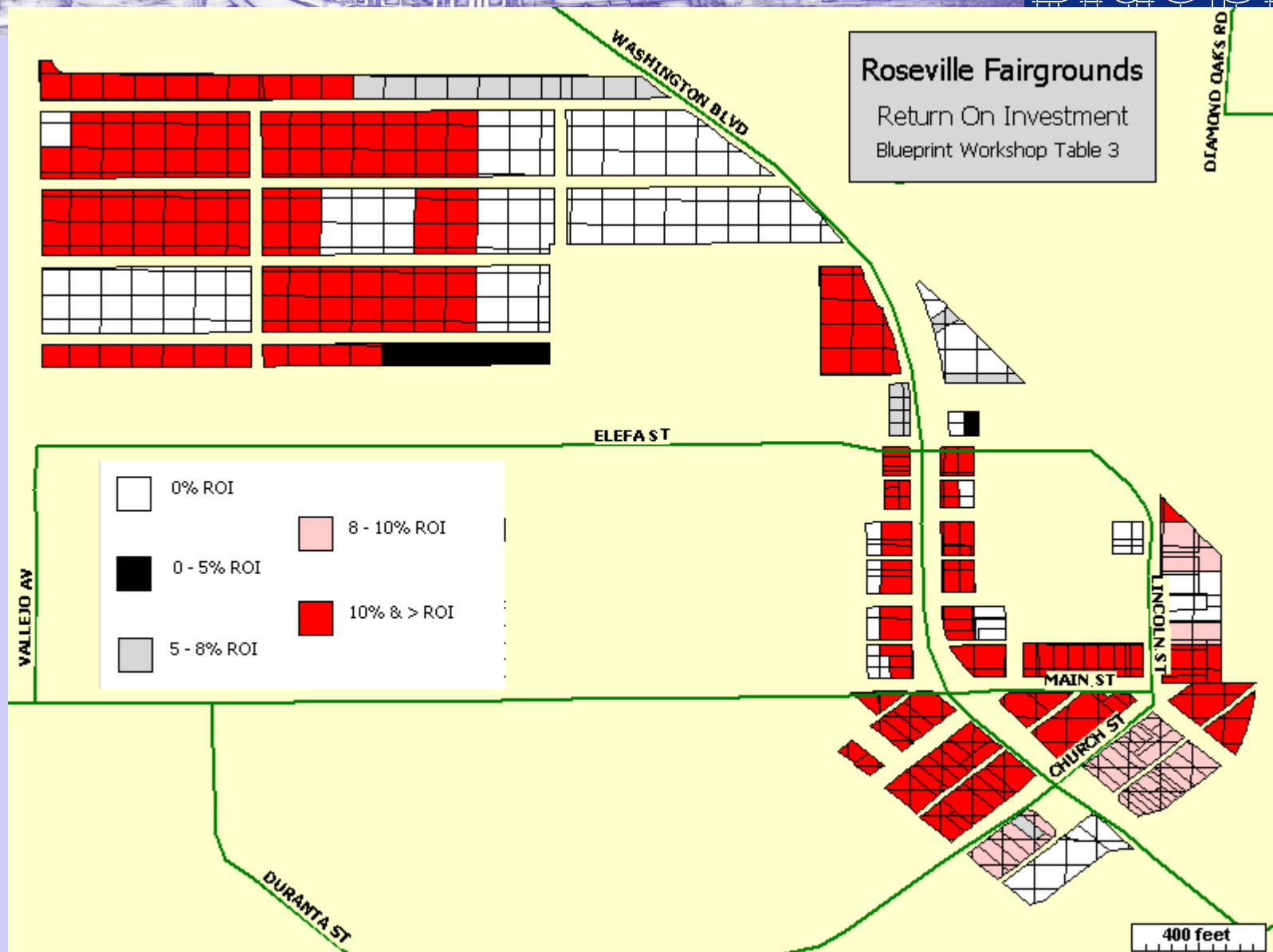
4 Small Lot Single
Family Residential



26 Parks



3 Medium Lot Single
Family Residential





PARCEL STATISTICS

<u>Development Type:</u>	5(R). TOWNHOUSE (RENTAL)
<u>Development Type Pct:</u>	100%
<u>Land Area:</u>	9,969 SQ FT
<u>Building Total Floor Area:</u>	4,119 SQ FT
<u>Building Footprint:</u>	1,373 SQ FT
<u>Yearly Income:</u>	\$59,317
<u>Yearly Operating Costs:</u>	\$17,301
<u>Building Construction Costs:</u>	\$389,266
<u>Parking Construction Costs:</u>	\$34,327
<u>Total Construction Costs:</u>	\$483,404
<u>Yearly Net Operating Income:</u>	\$42,016
<u>Land Value:</u>	\$59,811
<u>Calculated ROI:</u>	9%
<u>Weighted ROI:</u>	0%



County-wide Workshops **sacregionblueprint.org**

- October 27, Yolo County
- November 15, Sacramento County
- November 22, Sacramento County
- January 10, Sacramento County
- January 24, Sutter County
- January 31, Placer County
- February 7, Yuba County



Each County: Four Scenarios for Future (2050)

- Base Case Future + 3 other Alternatives
 - Land use maps
 - Transportation system
- Alternatives based on
 - Neighborhood workshop input
 - Local government Planners subcommittees
 - Economic, attitude, technical research and modeling

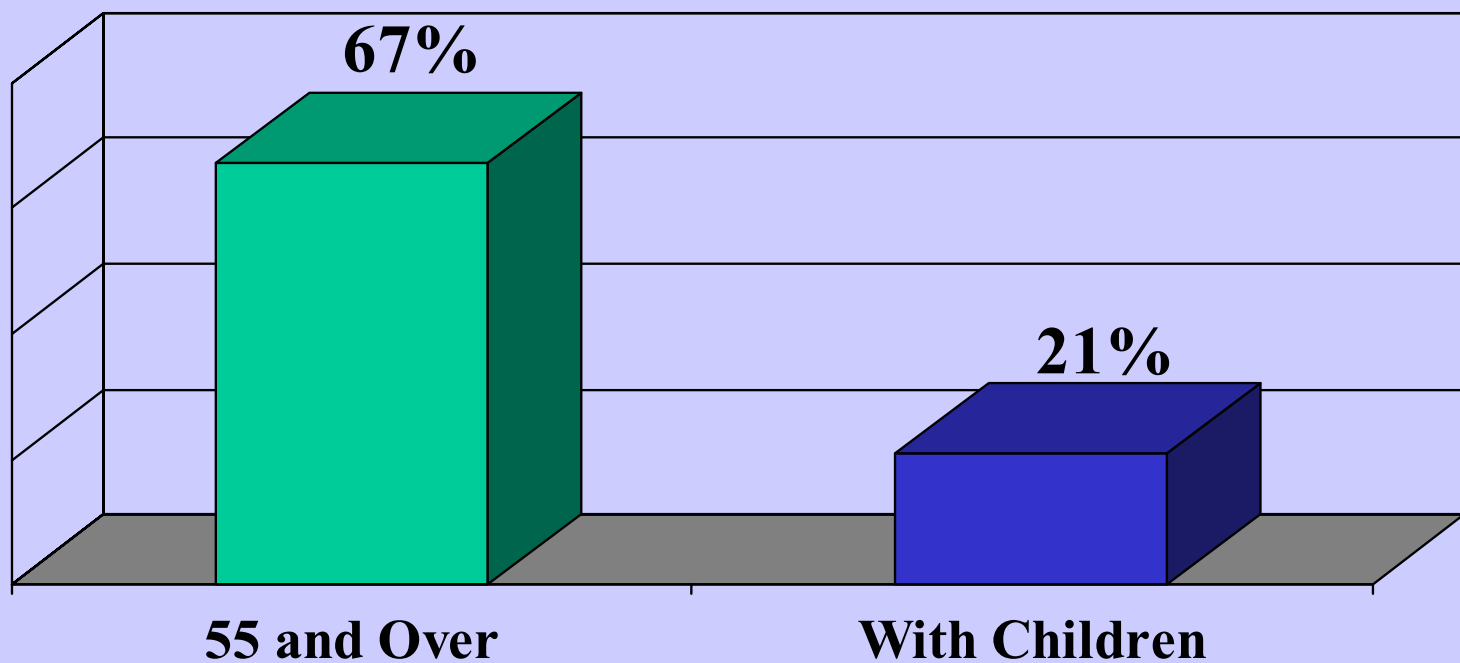


Issues Explored in Scenarios

- Amounts of growth
- Balance of land uses
- Mix of new housing units
- Balance of infill/redevelopment and greenfield
- Location of land uses and transportation facilities
- Density of new development
- Location of development re: resource lands

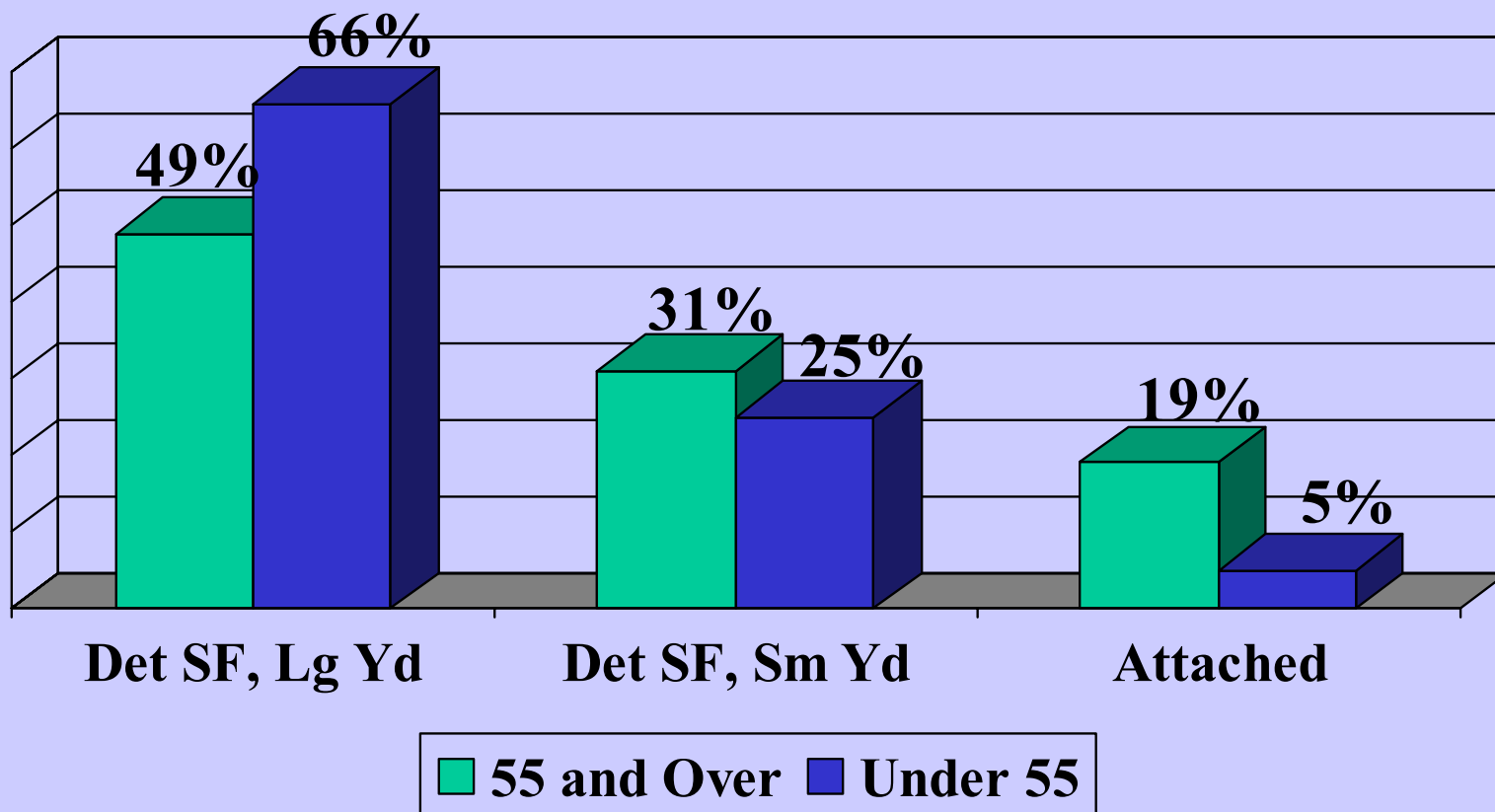


Growth in Households 2002 - 2050



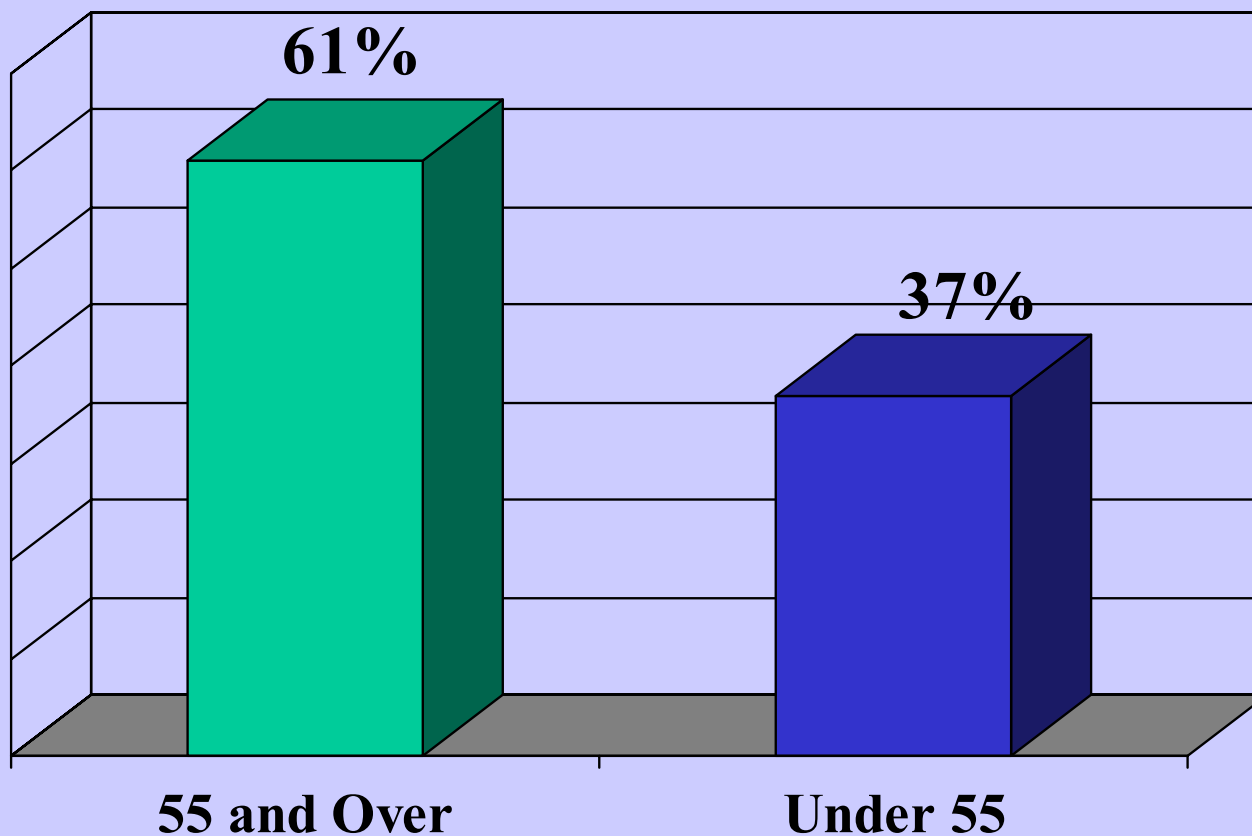


For Buyers - Home Type Likely to Purchase



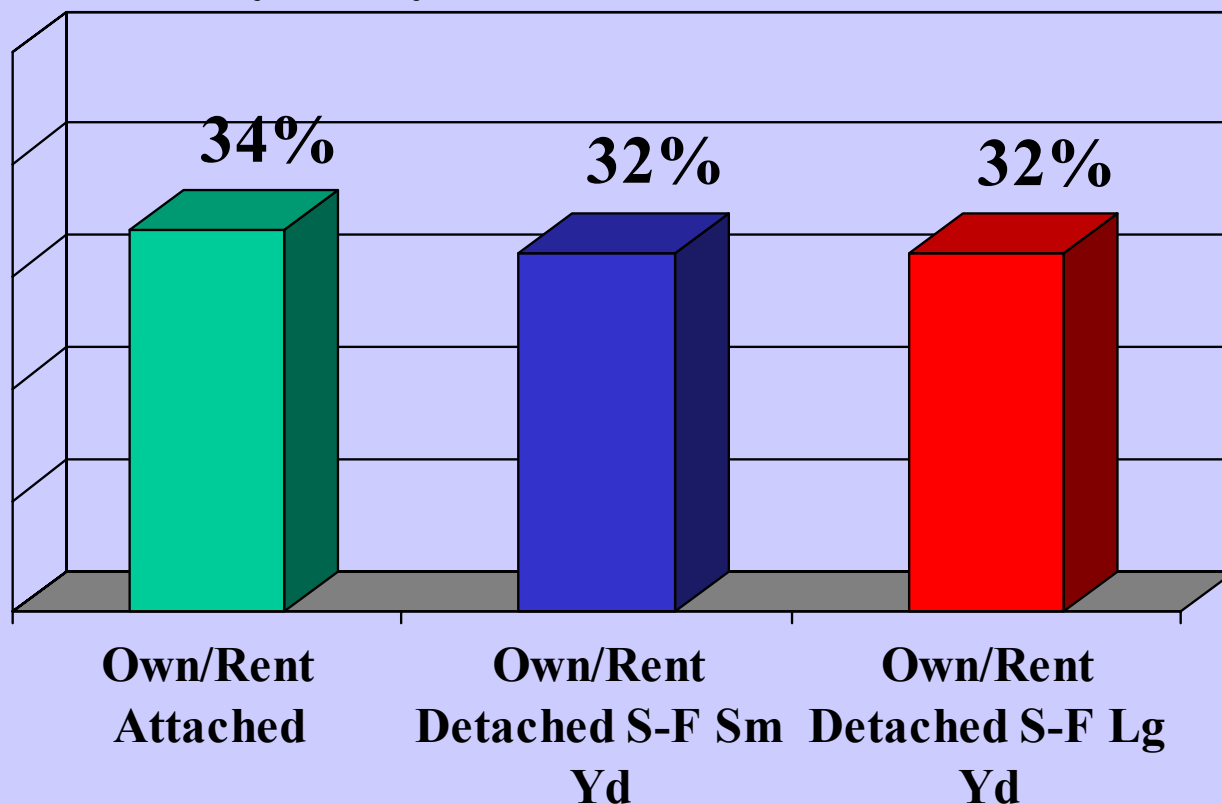


Prefer Shorter Commute, Smaller House/Backyard





Housing Preferences of Households 55 and Over Who Say They Will Move in 1 to 5+ Years





Structure of County Workshops

- Introductory information
 - Results of neighborhood workshops
 - Descriptions of 4 Scenarios for future
- Small groups discuss 4 scenarios and select 1 scenario they like the most
- Small groups refine 1 scenario, using laptop PLACE³S computer technology
- Results will help guide Regional Scenarios



Planning Theme

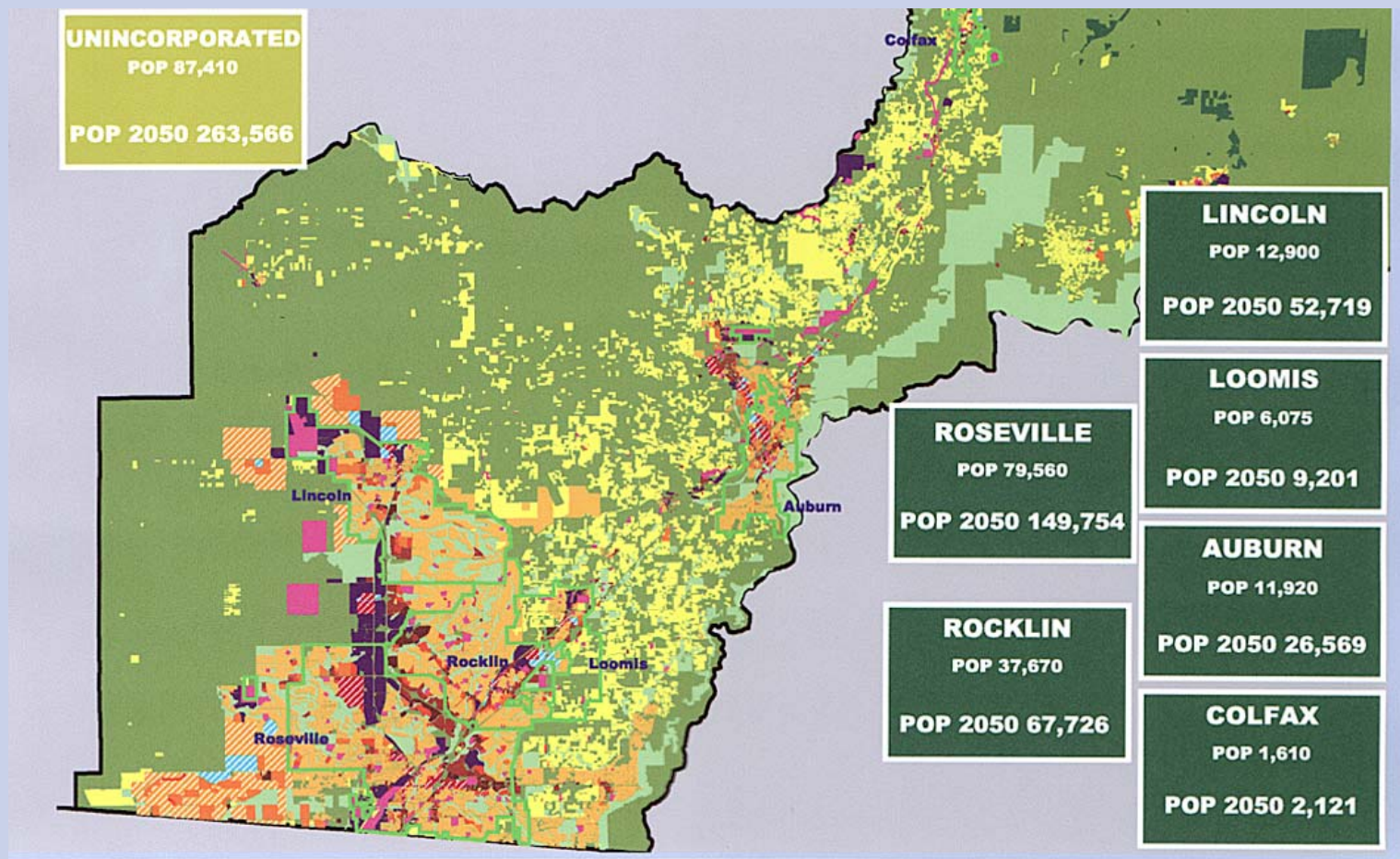
- Same total growth as A, but some growth focused in mixed use centers/corridors.
- More diverse and higher density housing stock.



Population

B

SCENARIO



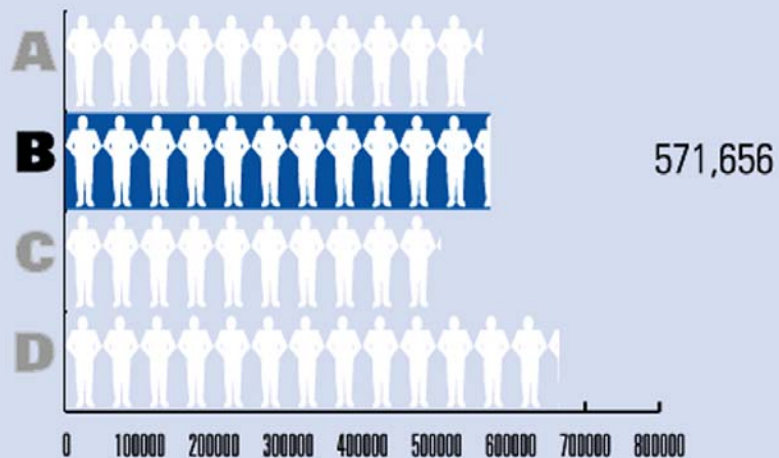


Population

B SCENARIO

TOTAL POPULATION IN 2050 (IN THOUSANDS)

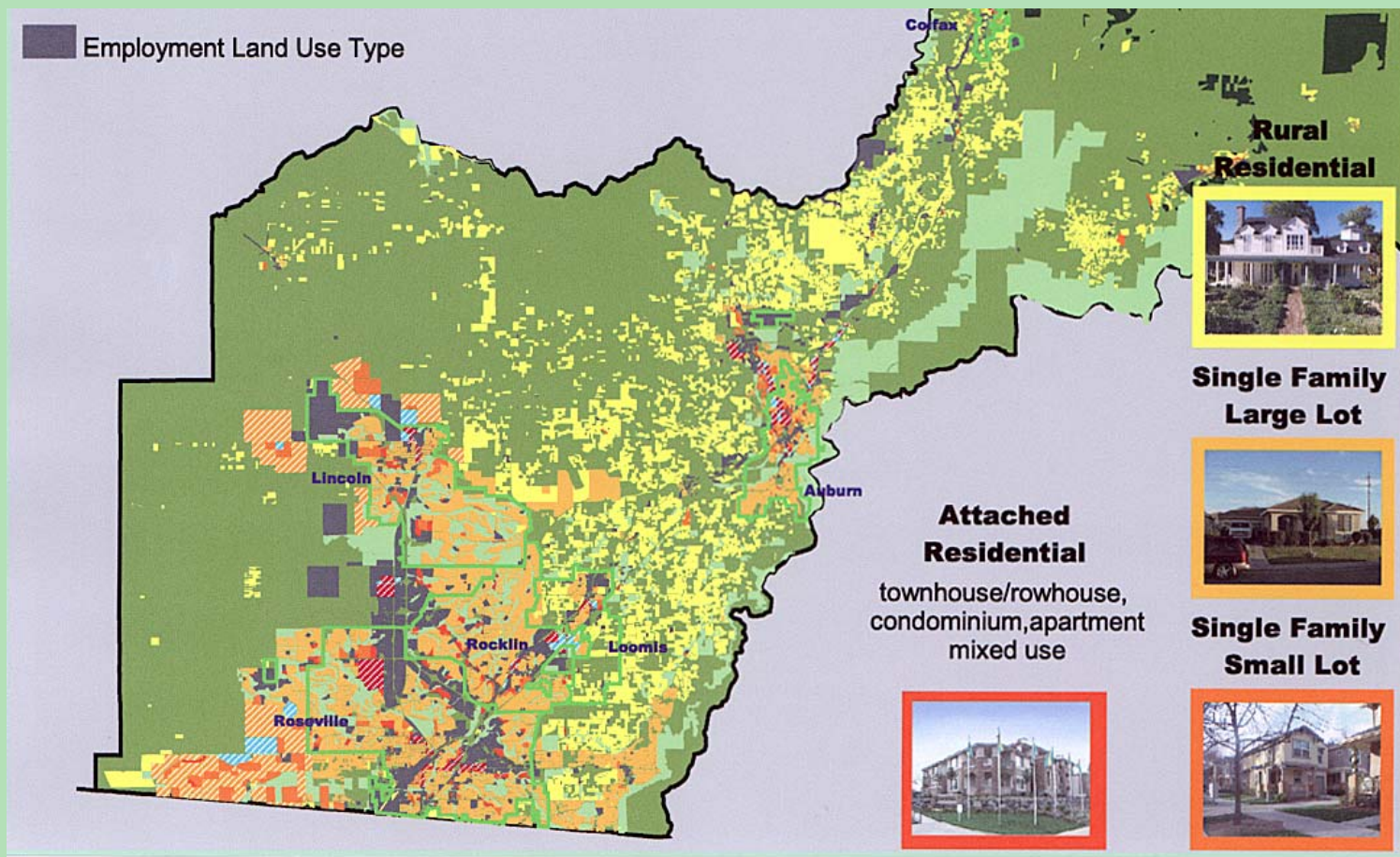
Existing Population – 2001
237,145





Housing Choices

SCENARIO
B

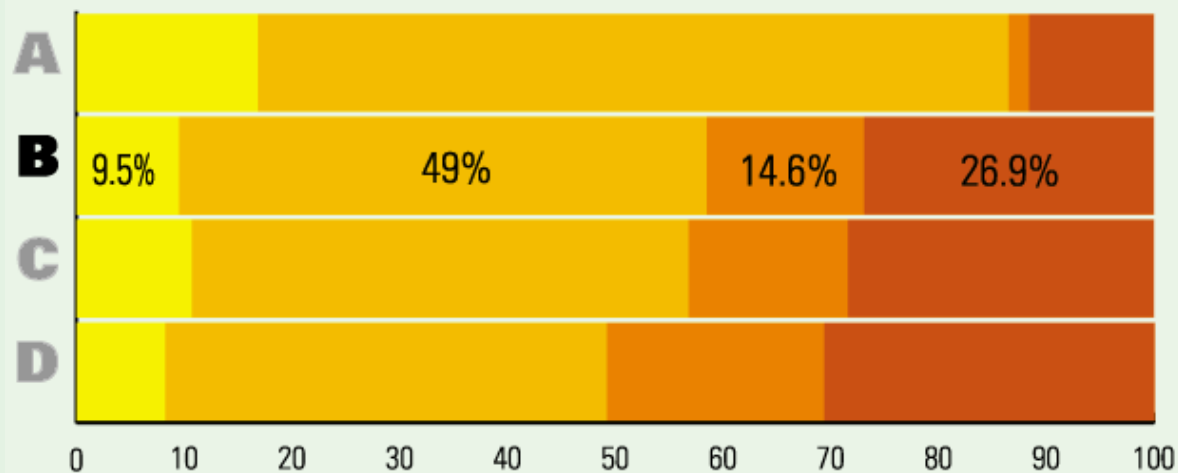




Housing Choices

SCENARIO
B

HOUSING TYPES in 2050
(in percent)



Housing Type



Rural Residential



Single-Family Large Lot



Single-Family Small Lot

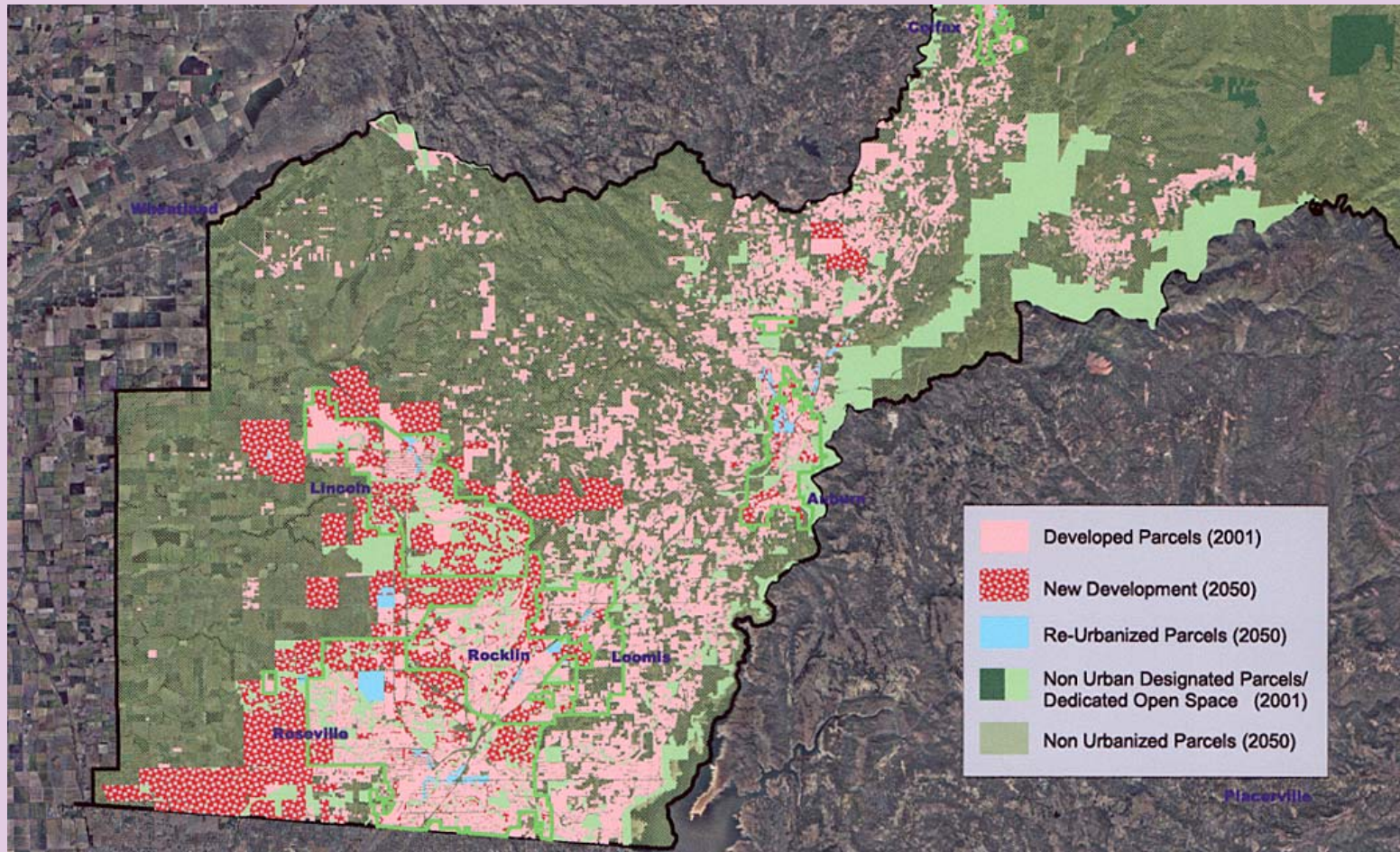


Attached Residential



Use Existing Assets

B
SCENARIO

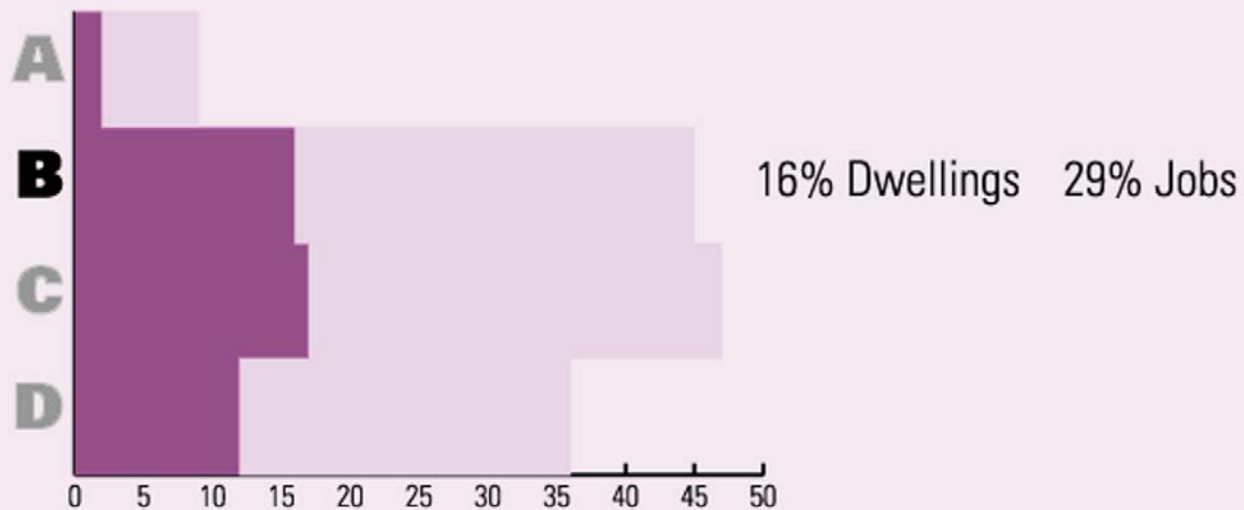




Use Existing Assets

SCENARIO
B

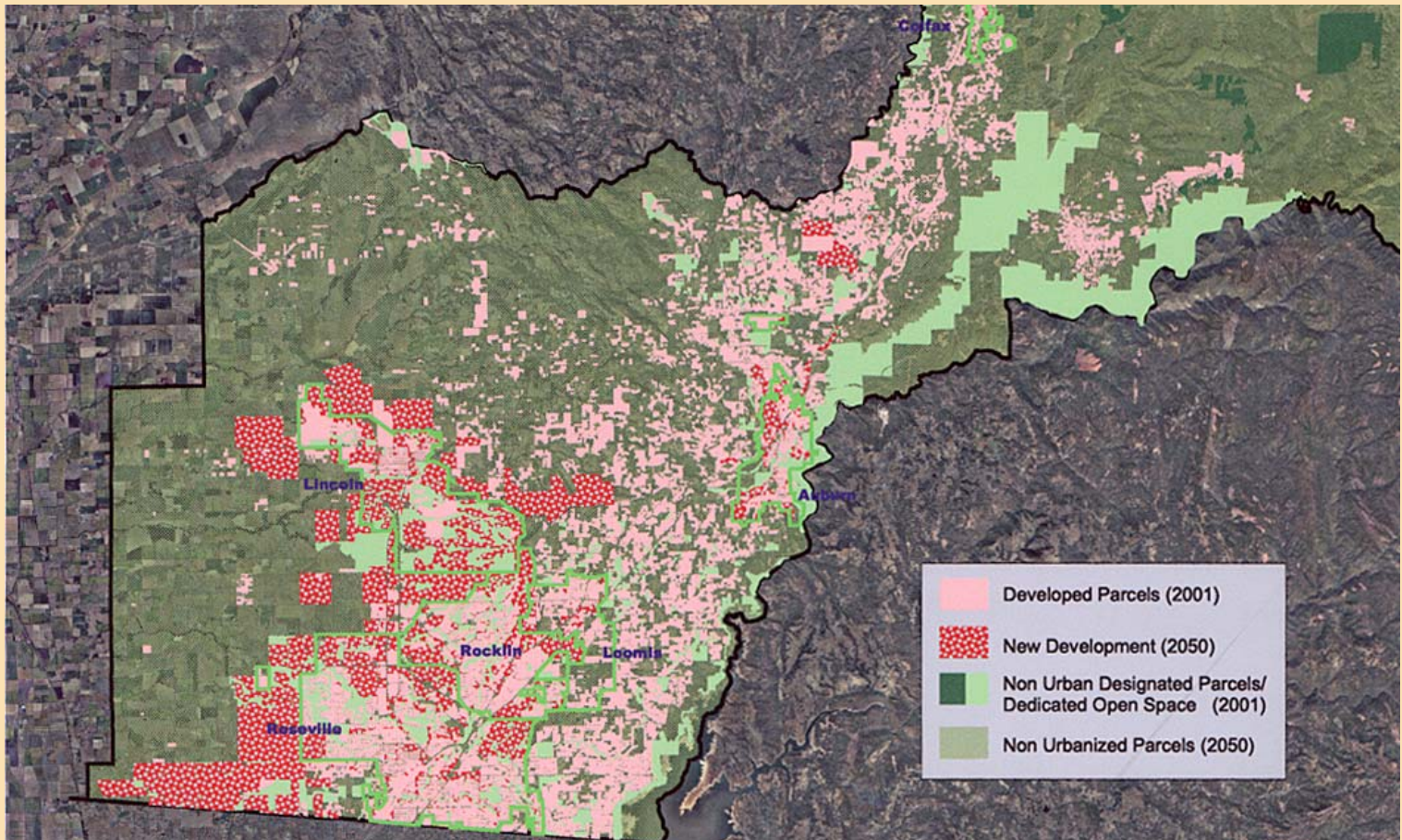
Percent New Growth in Identified Existing Centers/Corridors





Compact Development

B
SCENARIO

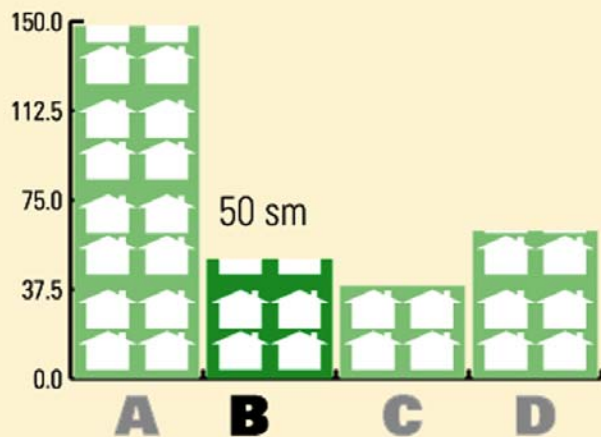




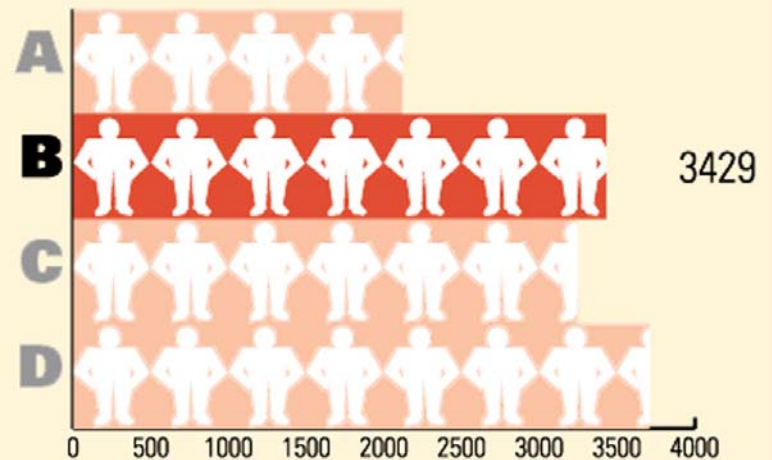
Compact Development

B SCENARIO

ADDITIONAL SQUARE MILES
of Urbanized Land Through 2050



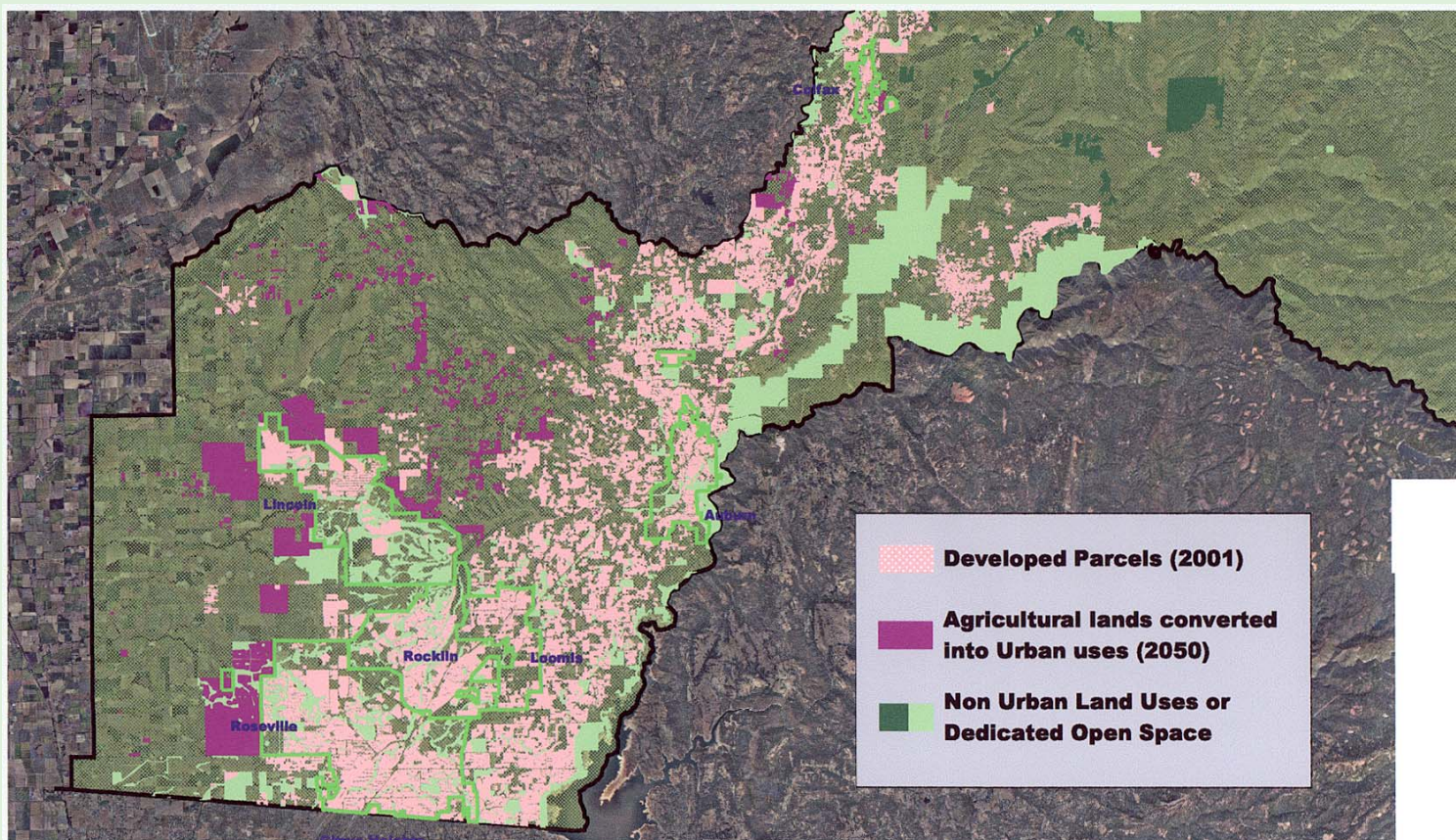
PEOPLE PER SQUARE MILES
of Urbanized Land Through 2050





Natural Resources Conservation

SCENARIO
B

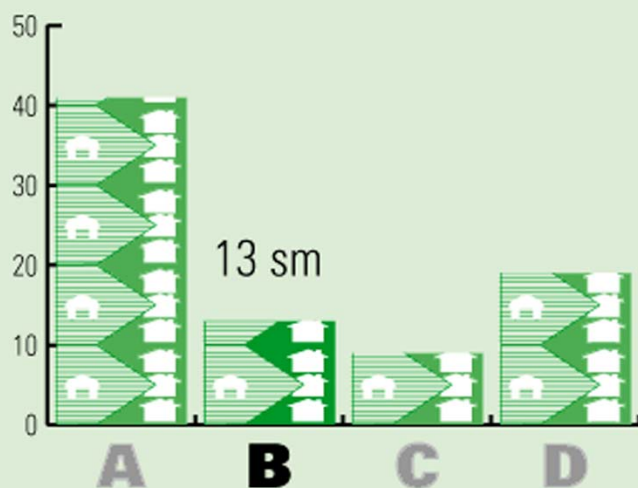




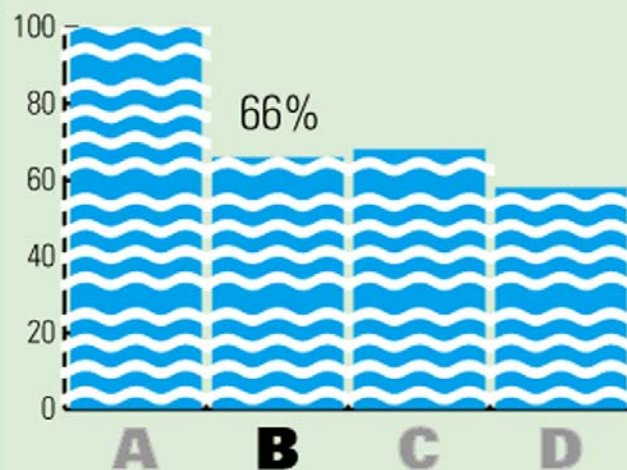
Natural Resources Conservation

SCENARIO
B

AGRICULTURAL LAND
CONVERTED TO URBAN USE
(in square miles)



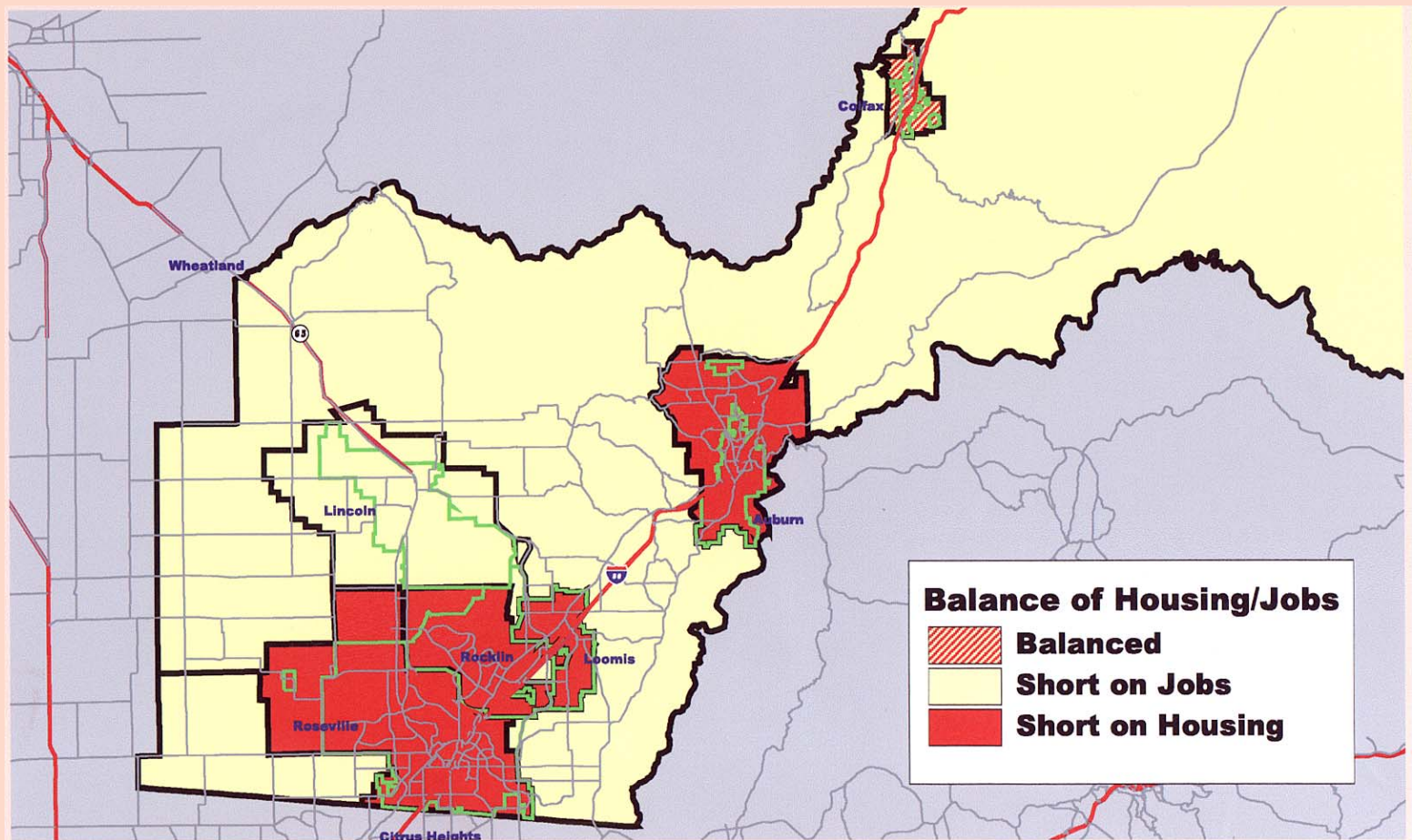
POTENTIAL RESIDENTIAL OUTSIDE
(LAWN) WATER USE





Mixed Land Use

SCENARIO
B

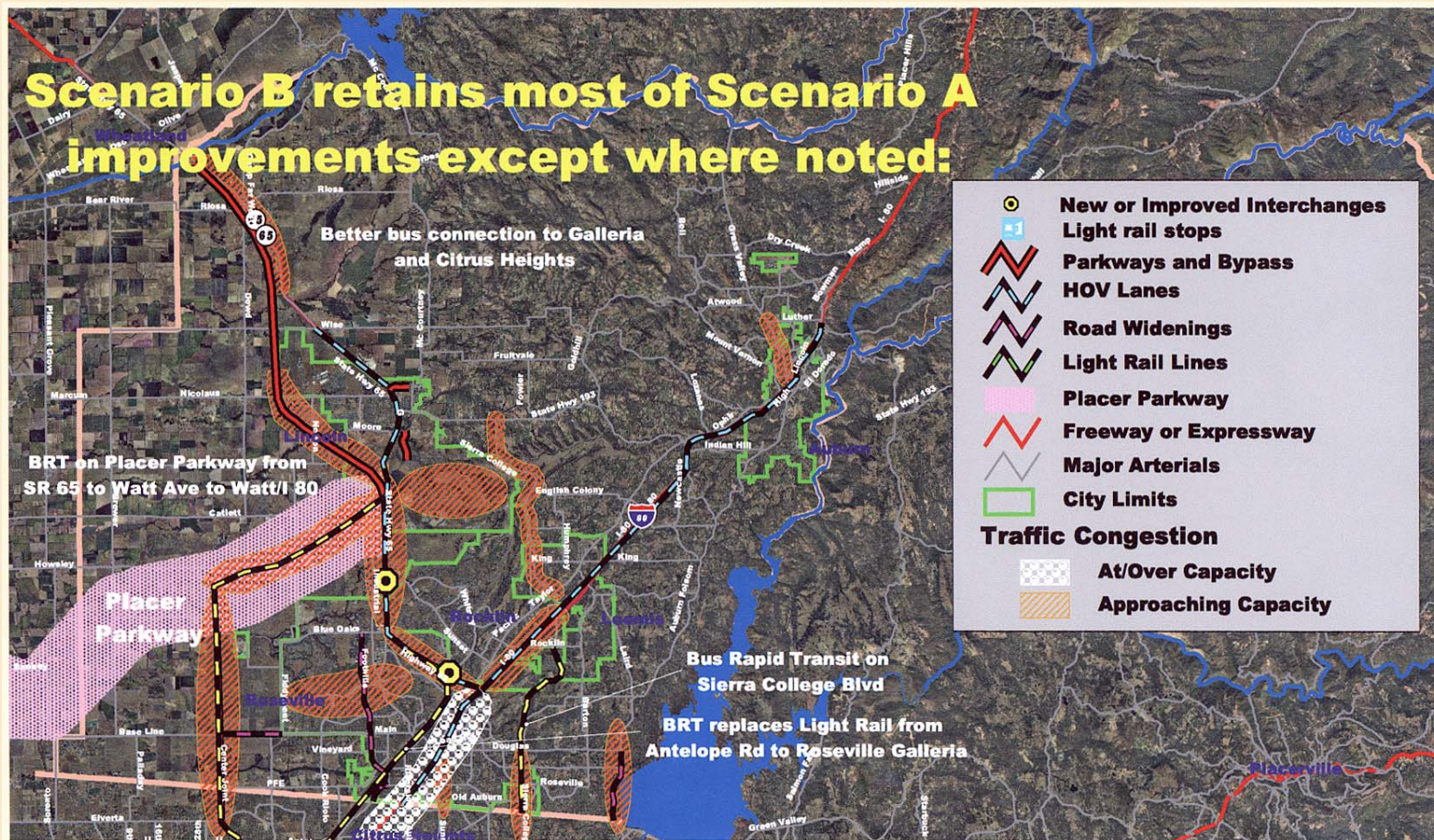




Transportation Choices

B SCENARIO

Scenario B retains most of Scenario A improvements except where noted:

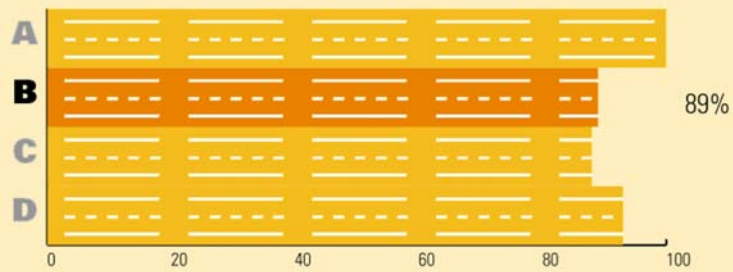




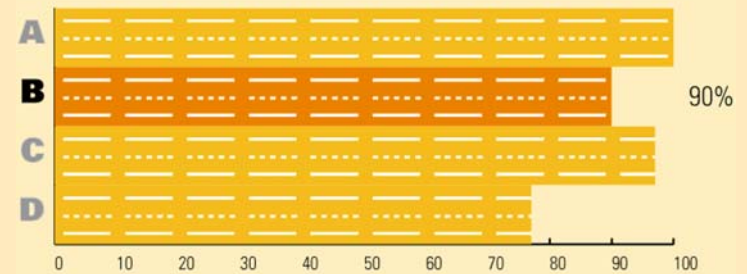
Transportation Choices

B SCENARIO

TOTAL VEHICLE MILES TRAVELED



VEHICLE MILES TRAVELED PER DAY
(per household)

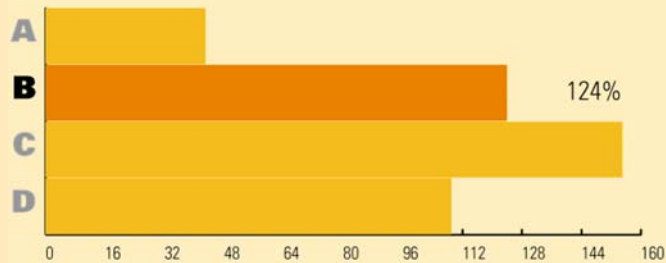




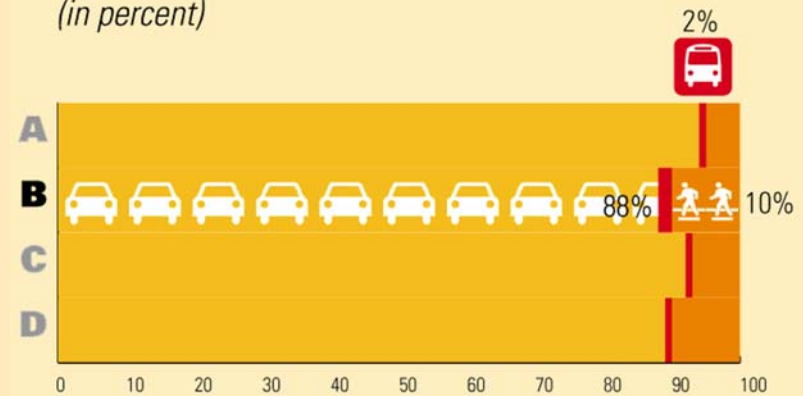
Transportation Choices

B SCENARIO

CHANGE IN PER CAPITA TRANSIT SERVICE FROM YEAR 2000
(in percent)



TYPE OF TRIPS
(in percent)

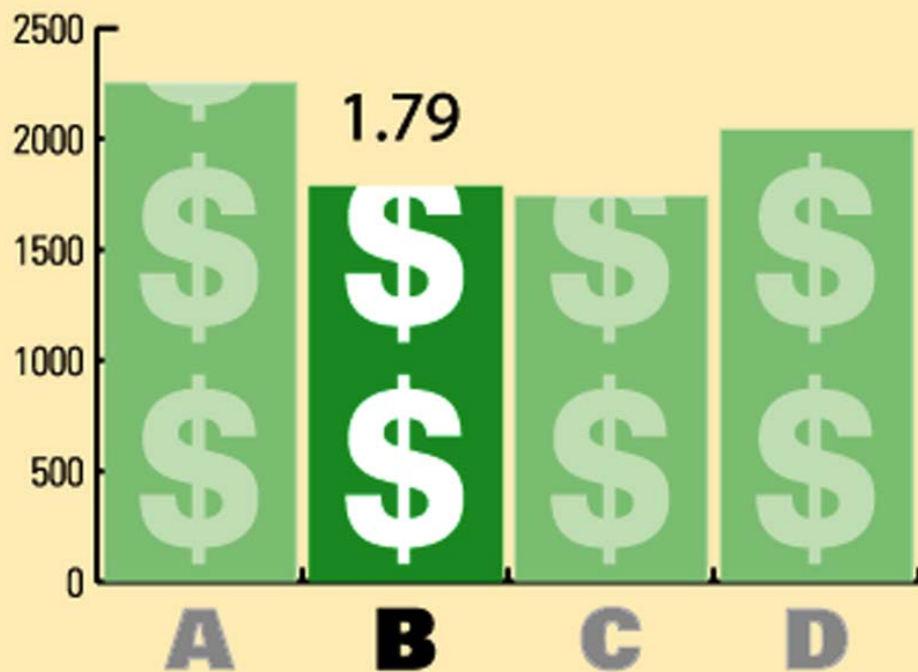




Transportation Choices

SCENARIO
B

CAPITAL COSTS
(in billions)

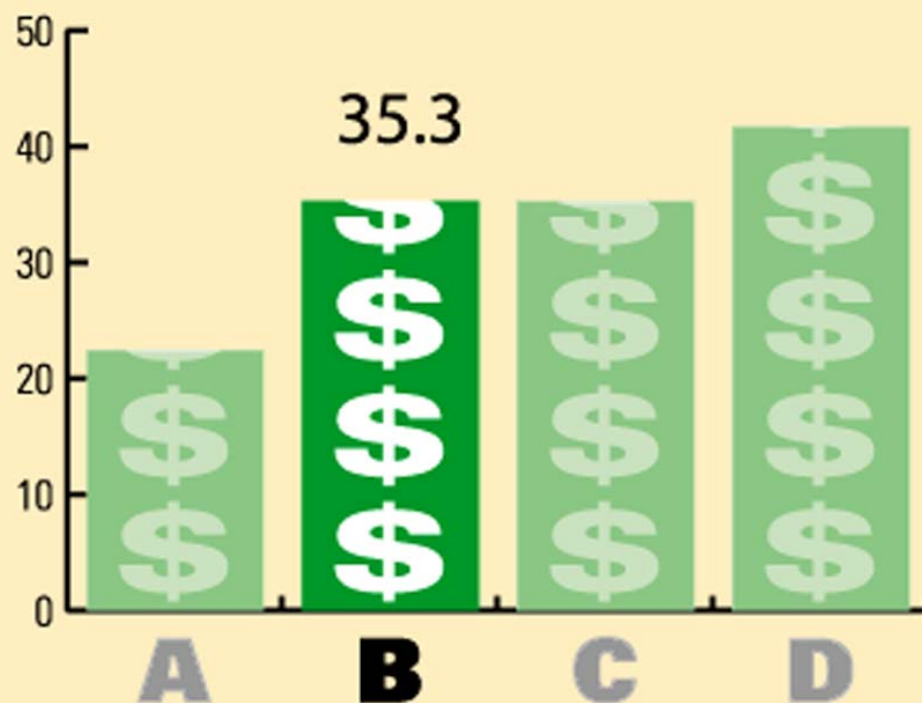




Transportation Choices

SCENARIO
B

ANNUAL OPERATING COSTS
(in millions)



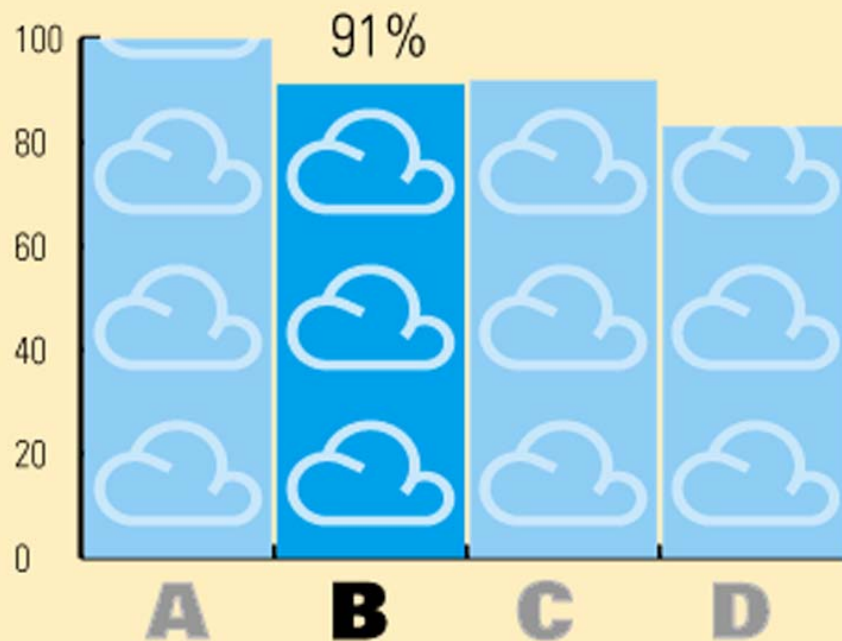


Transportation Choices

SCENARIO
B

AUTO EMISSIONS PER CAPITA

Averages of: Reactive Organic Gases / Oxides of Nitrogen / Carbon Dioxide / PM10 (particulate)





Blueprint Milestones for 2004

- Create 3 regional land use/transportation scenarios (feb-april)
- Regional forum/workshop (april 30, Convention Center)
- Discussion draft preferred alternative (summer)
- Electronic Town Hall (september)
- Board action on preferred alternative (december)



Community Design Program: Round One Projects

- \$500 million – 20 years
- Land uses that benefit transportation system
- \$12 million in 2003
- Community workshops help identify projects

Before



After?

